

William Paterson College does not discriminate on the basis of race, color, age, sex, religion, creed, national origin or handicap. College policies and practices are consistent with federal and state laws pertaining to equal opportunity in admission and education policies, scholarship, loan, athletic and other school-administered programs.

Specifically, William Paterson College complies with Title IX of the Education Amendments of 1972, Section 504 of the Vocational Rehabilitation Act of 1973, Title VI of the Civil Rights Act of 1964 and their respective implementing regulations.

The College reserves the right to make changes in its academic program, courses, schedules, fees or calendar. With respect to such changes, students have a continuing right to pursue programs in the form that applied at the time of their matriculation or to choose program changes that occur subsequently.

For additional information, catalogs and applications, write or call:

Office of Admissions William Paterson College Wayne, New Jersey 07470 (201) 595-2125

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William Paterson College Undergraduate Catalog 1988-90

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Academic Calendar

Fall 1988

September Thursday First day of classes 1 Last day for 100% refund for 2 Friday withdrawal from fall semester 5 Labor Day, College closed Monday 7 Wednesday Fall semester student teaching begins October 10 Monday Last day for refund for withdrawal from fall semester 10 Last day for withdrawal from a Monday course for fall semester 10 Monday Columbus Day, College open, classes in session November 8 Tuesday Election Day, College open, classes in session 11 Friday Veterans Day, College open, classes in session 24 Thanksgiving Day, College closed Thursday 25 Classes cancelled, College open Friday 26 Classes in session Saturday December 19-23 Inclusive Examination period and/or

		continued class instruction
16	Friday	Fall semester student teaching ends
23	Friday	Fall semester ends
24	Saturday	College closed, winter break begins
Janu	ary 1989	
2	Monday	New Year's Day celebrated, College closed
16	Monday	Martin Luther King, Jr.'s, Birthday, College closed

Spring 1989

January

17	Tuesday	First day of classes
18	Wednesday	Last day for 100% refund for
		withdrawal from spring semester
23	Monday	Spring semester student teaching
		begins

February

repri	lary	
13	Monday	Lincoln's Birthday celebrated, College open, classes in session
20	Monday	Washington's Birthday, College closed, classes cancelled
21	Tuesday	Tuesday classes cancelled and replaced by Monday classes
23	Thursday	Last day for refund for withdrawal from spring semester
23	Thursday	Last day for withdrawal from a course for the spring semester
Marc	h	
19–26	Inclusive	Spring break, classes cancelled, College open
24	Friday	Good Friday, College closed
May		
10–16	Inclusive	Examination period and/or continued class instruction
12	Friday	Spring semester student teaching

ends

Spring semester ends

Commencement (tentative)

Sunday Presession 1989

Tuesday

16

21

8

May 22 Monday Presession registration 23 Tuesday First day of classes 29 Monday Memorial Day, College closed June 1 Last day for refund for withdrawal Thursday from presession 1 Last day for withdrawal from a Thursday course for presession 22 Thursday Presession ends

Summer Session 1989

June		
26	Monday	Summer session registration
27	Tuesday	First day of classes
July		
4	Tuesday	Independence Day, classes cancelled, College closed
11	Tuesday	Last day for a refund for withdrawal from summer session
11	Tuesday	Last day for withdrawal from a course for summer session
Anon	st	

Tuesday Summer session ends

General Information

William Paterson College

Since its founding in 1855, William Paterson College has been educating the people of New Jersey. Their needs and the College—have changed dramatically during the years, yet the commitment to education, to the future, to improving the quality of life where people live and work remains stronger than ever. Providing accessible, quality education, the College is a primary resource for training the education, business, health care, science and art professionals of northern New Jersey.

More than a century of meeting these diverse educational needs has given the College its rich texture and unique character. Its long history is everywhere symbolized on its 250-acre hilltop campus in Wayne. Even the shortest stroll around the grounds delights the eye with diversity—from the variety of faces, ages and interests of our 9,000 students to the very fiber of the physical institution as well. Here radio and television transmitters vie with towering pines; modern architecture shares the hillside with historic landmarks; and students pass from parking lots to wooded lanes to reach their destinations. And a location only 20 miles west of the cultural and cosmopolitan resources of New York City adds to the richness of the weave. The College's diversity of programs is perhaps the best evidence of the strides made since its founding. Degree offerings other than those leading to a teaching career were added in 1966; ranging from the traditional to the contemporary, they provide students the education most suited to their interests and needs. Today, 34 undergraduate and 13 graduate degree programs are offered in the College's seven schools: Arts and Communication, Education and Community Service, Health Professions and Nursing, Humanities, Management, Science and Mathematics and Social Science.

Supported by the citizens of New Jersey, William Paterson College is one of nine in the state college system. Operating under the policy direction of the State Board of Higher Education and governed by a local board of trustees, the College is accredited by the Middle States Association of Colleges and Secondary Schools.

A long tradition of weaving the needs of the people of New Jersey into the fabric of the College has made William Paterson the vital and flexible institution it is today. The challenge for the future is the continued strengthening of our intellectual, economic and cultural development. This responsiveness and commitment ensures William Paterson's place among the best state colleges in New Jersey.

Campus Facilities

The major buildings which house and support the programs offered by the College's seven schools include the following.

Sarah Byrd Askew Library Open seven days a week when classes are in session, the library's resources include over 280,000 books, more than 1,700 periodical titles and an extensive collection of nonprint media. Services include professional reference assistance, online reference services, library instruction, interlibrary loan and audiovisual previewing facilities.

Caldwell Plaza An open forum located at the center of the campus, the plaza joins Ben Shahn Center for the Visual Arts, Science Hall, the Student Center and the Towers.

Center for Academic Support Located between the Coach House and Raubinger Hall, the center provides tutoring and workshops for individuals seeking assistance in coursework and basic skills.

The Coach House Computer facilities are located here. The College is a member of the Educational Computing Network, which is a statewide computer network supporting multilanguage, high-speed service for administrative and academic users.

Heritage Hall Air-conditioned and complete with furnishings and appliances, Heritage Hall and Pioneer Hall provide apartment-style living for 530 students.

Hobart Hall Located on Pompton Road, across from the main campus and accessible by a footbridge, it houses the Communication Department; WPSC, the campus radio station; WPC-TV, the television center; a film-making laboratory; the Communication Disorders Department and the Child Care Center.

Hobart Manor One of the two original structures on campus, the other being the Coach House, Hobart Manor is now a national historic site. It was at one time the home of the family of Garret Hobart, the twenty-fourth vice president of the United States. Admissions, the Alumni Association and the Office of Community Affairs are located here.

Hunziker Hall The Theatre Department, including its offices, scenic design and costume shops, Hunziker Theatre and the theatre box office are located here, as are the Office of Field Laboratory Experiences and a number of classrooms.

Hunziker Wing Containing classrooms, the Departments of Nursing and Health Science and the office of the dean of the School of Health Professions and Nursing, it also houses a learning resource center and the college print shop.

Matelson Hall Houses the office of the dean of Student Services, the dean of the School of Humanities and offices for the school's component departments: English, languages and cultures, history, philosophy and African and African-American studies. Also located here are the Center for Continuing Education, the Office of Career Services, the Athletic Office, the Bilingual Education Program, the Women's Center and Campus Police.

Morrison Hall Included here are the office of the president of the College and other central administration offices: academic affairs, administration and finance, affirmative action, the business office, college relations, personnel and purchasing.

Pioneer Hall A student residential hall, it is described - above under Heritage Hall.

Raubinger Hall An information center and the offices of the dean for Student Services, the Registrar and Financial Aid are located here. Contains offices for the dean of the School of Education and Community Service and the following departments: urban education, special education, elementary education and secondary education.

Rec Center Designed to serve as the focal point for physical recreational activities, the Rec Center contains a large multipurpose area that can accommodate 4,000 spectators at concerts or exhibitions, or can be divided into three courts for basketball, tennis, volleyball or badminton. Additional facilities include four racquetball courts, a large weight and exercise room, a two-lane jogging track, saunas and Jacuzzis.

Science Hall Houses the School of Science and Mathematics and the School of Social Science. Offices for each school's dean and the following programs are located here: biology, chemistry, mathematics, physics, environmental studies, psychology, political science, sociology/ anthropology and geography Laboratories, research facilities and two large lecture halls containing modern audiovisual instructional equipment complete the complex. Ben Shahn Center for the Visual Arts Features a central, two-story glass-walled and domed courtyard, art galleries, studios, classrooms, the office of the dean of the School of the Arts and Communication and Art Department offices.

Shea Center for Performing Arts Features a 900-seat theatre; band, orchestra and choral practice rooms; class-rooms and the offices of the Music Department.

Student Center Serving as a focal point for campus activities, the Student Center includes a dining room, a snack bar, Billy Pat's Pub and the Sweet Shoppe. Also housed here are game rooms, performing arts and visual arts lounges, the college bookstore, a print shop, a full-service bank and a ballroom. The Student Activities Office is located here, as are the offices of various student organizations and the college newspaper, the *Beacon*.

The Towers A four-winged dormitory facility, completed in 1982, which accommodates 1,033 students. Complete with modern furnishings, each room houses two students. Two rooms, connected by a bathroom, comprise a suite.

Wayne Hall A variety of food service facilities and meeting rooms and the Advisement Center are located here.

White Hall Contains offices for the dean of the School of Management and the schools component units: accounting and law, economics and finance, management and marketing science and computer science and quantitative analysis. White Hall also houses the Office of College Communications and the Student Health Center.

Wightman Field A light-equipped athletic complex with fields for baseball, field hockey, football, soccer and softball. Eight tennis courts, a permatrack and locker facilities are among the additional athletic facilities.

Wightman Memorial Gymnasium Two gyms, an Olympicsized swimming pool, training rooms, a weight room and classrooms are included in the physical education building.

Admission

William Paterson College invites applications from all qualified students. As a matter of policy, the College does not discriminate on the basis of sex, race, color, national origin, religion, age or handicap in its admissions policies, educational programs, scholarship and loan programs, athletics, activities or employment policies.

General Admissions Requirements

To be admitted to William Paterson College as an undergraduate student an applicant should: (1) be a graduate of an approved high school or (2) hold a high school equivalency certificate and (3) have taken the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board or the test battery of the American College Testing Program (ACT). Achievement tests are not required. Students are admitted in September and January of each year.

Admission requirements and procedures vary slightly for six groups of students: (1) those entering the freshman class as full-time students, (2) those entering the freshman class as part-time students, (3) those entering as transfer students with advanced undergraduate credits, (4) those re-entering the College, (5) those seeking a second undergraduate degree, (6) those entering as continuing education students.

Application Procedure Students seeking undergraduate admission, whether full time or part time, must submit a completed application form, which may be obtained from the Office of Admissions, William Paterson College, Wayne, New Jersey 07470. The completed application must be accompanied by a \$10 fee (check or money order) made payable to William Paterson College. This fee is nonrefundable and will not be applied toward any other fees or charges.

Because application deadlines vary from year to year, a current admission calendar is sent with each application. Generally, freshmen and transfer students should file applications before May 1 for fall admission and November 1 for spring admission.

Required Academic Preparation The applicant must request that a secondary school official send William Paterson College a transcript indicating that the applicant has been graduated, or will be graduated during the current academic year, from an approved secondary school.

To be eligible for consideration for full-time admission, applicants are required to have taken a college preparatory course of study in high school and to have successfully completed 16 Carnegie Units (academic/college preparatory classes).

Specific distribution requirements include:

English	s
College preparatory math 2 unit	S
Social studies 2 unit	S
Laboratory science	it
Additional college preparatory subjects 5 unit	s
Academic/Carnegie electives	s

Prospective students who have a New Jersey equivalent high school diploma may present the diploma in lieu of these requirements. Students planning to major in mathematics or science are expected to have taken more than the minimum required units in these subjects. Applicants for the nursing curriculum are expected to have completed a full year of both biology and chemistry.

Although an admissions interview is not required, prospective applicants are strongly encouraged to visit the College and speak with an admissions counselor.

Entrance Examination All applicants for admission to fulltime study must take the Scholastic Aptitude Test (CEEB: SAT) by January of the senior year or earlier.

In applying for the test, applicants should indicate that the results are to be sent to William Paterson College, Code 2518. Application forms may be secured from the high school guidance office.

A prospective student who has been out of high school for more than two years has the opportunity to seek admission as a matriculated student without taking the Scholastic Aptitude Test. The Committee on Admissions may waive this requirement if other criteria are available to evaluate the candidate for admission.

Notice of Decision Four factors are considered in the evaluation of applications: high school record, Scholastic Aptitude Test results, participation in extracurricular activities and a recommendation from a guidance counselor or teacher. All announcements on admission decisions are made on a rolling basis. Decisions are not normally made until all parts of the application are on file in the Admissions Office.

An offer of admission is conditional upon satisfactory completion of high school and submission of the health form which is included in the admissions packet. To accept an offer of admission, the applicant must pay the required acceptance deposit.

Acceptance Deposit Upon notification of acceptance, the applicant will inform the College of the intention to enroll and remit a deposit of fifty dollars (\$50) at that time. This payment is applied toward the general service charge (\$25 for each semester of the first year) and is nonrefundable and nontransferable.

Scholarships A limited number of competitive academic scholarships is made available to incoming freshmen through the generosity of alumni, friends and corporations. To be eligible for a scholarship, a candidate must fulfill the entrance requirements of the College. Scholarships are awarded by the Scholarship Committee based on scholastic standing, character reference and a written essay. Financial need is not a consideration. Full-time freshman applicants who rank in the top 15 percent of their high school class and who have a combined SAT score of 1,000 should request an Academic Excellence scholarship application.

Transfer Admission with Advanced Standing Students who have earned credits at other colleges may apply for admission with advanced standing for full- or part-time study by following the procedures above with the following changes:

- 1. File an application for admission and all other required materials not later than May 1 for fall admission or November 1 for spring admission
- Have official transcripts of all courses taken at schools previously attended forwarded to the Office of Admissions. Transcripts should be forwarded as soon as possible after filing the application. Student or unofficial copies of transcripts will not be accepted
- 3. All previous college credits earned at other institutions must be listed on the application for admission. Failure to do so may result in academic penalty or dismissal. Credits earned at institutions fully accredited by regional accrediting associations are generally acceptable, provided such credits are appropriate to the student's program at William Paterson College. To be accepted,

courses must have been passed with a minimum satisfactory grade (C or the equivalent). The College reserves the right to accept or reject credits earned in institutions not accredited by regional accrediting associations. Courses completed in nonaccredited institutions may be validated for credit through challenge examinations. Only courses completed at William Paterson College are included in calculating a student's cumulative grade point average.

Credit is granted for courses taken at another college while the student is enrolled at William Paterson College only when written permission to register for such courses is granted by the appropriate dean. Upon acceptance of the credits, the dean shall forward to the registrar the approval to adjust the student's permanent record.

Limitations on Transfer Credits All credits eligible for transfer for advanced standing are subject to the following limitations:

- 1. No more than 70 credits may be transferred from a twoyear college
- 2. No more than 90 credits may be transferred from a fouryear college
- 3. The last 30 credits required for graduation must be earned at WPC; 24 of these must be earned on the main campus
- 4. No more than 15 transfer credits required for a major will be accepted
- 5. Credits earned 10 years prior to the date of admission are accepted only at the discretion of the College, regardless of achievement.

Full-Faith-and-Credit Policy William Paterson College recognizes and abides by the New Jersey Full-Faith-and-Credit Policy (see below). Further information regarding specific curriculum requirements and stipulations and articulation agreements may be obtained by calling the Admissions Office at (201) 595-2125.

Policy of the Board of Higher Education Concerning Full-Faith-and-Credit Transfer and Articulation Between the Public Community Colleges, Edison College and the State Colleges of New Jersey

- A. Graduates of approved transfer programs in New Jersey county colleges and Edison College:
 - 1. Graduates shall be guaranteed admission to a state college, although not necessarily to the college of their first choice. A uniform reply date for all transfer applications should be established
 - 2. (Graduates shall be considered to have met all general education requirements of the state college nor-

mally expected of their own students in the freshman and sophomore years.) General education credits earned by graduates of approved transfer programs shall be accepted in their entirety toward the general education requirement at the state college. Each state college shall apply the same rules concerning acceptability of D grades of graduates which it applies to its own students

- 3. A state college may not require graduates to successfully complete more than an additional 68 credits in order to be eligible to receive the baccalaureate degree, unless such students change their major into an area for which their county college preparation may not have been appropriate
- 4. While admission to a state college is guaranteed, admission to a specific curriculum shall be determined by the college based upon the criteria which it imposes upon its own students.
- B. Nongraduates of approved transfer programs in New-Jersey county colleges and Edison College:
 - Normally, county college students shall be encouraged to complete the associate degree prior to transfer. However, state colleges may admit nongraduates under the same conditions which it imposes upon any transfer student, except as provided below. Acceptability for admission and acceptance of credits shall be at the discretion of the state college
 - Students who earn sufficient credits to graduate from a community college transfer program, but have not completed a specific course requirement, should be treated as if they were graduates, provided that the missed requirement is not a requirement of the receiving state college.
- C. Graduates and nongraduates of nontransfer programs at New Jersey county colleges and Edison College:
 - State colleges may admit graduates or nongraduates of nontransfer programs and decide on the transferability of credits at their discretion, except as further provided below
 - 2. When a state college establishes a program which has as one of its major purposes the enrollment of graduates of specific programs which are not formally designated as approved transfer programs, then such students shall be entitled to guaranteed enrollment in such a program under the same conditions as if they were graduates of an approved transfer program
 - 3. When a state college finds that a large number of graduates of specific programs are applying for admission as transfer students to a state college program other than those indicated in C-2 above, the institutions involved shall jointly determine and publish a standard listing of which courses, under what conditions, shall be accepted by the state college for transfer credit.

Out-of-State Students The same admissions requirements apply to out-of-state applicants as apply to New Jersey residents. Out-of-state students are encouraged to apply for admission and invited to visit the campus. There are several motels near the College for those who wish to spend some time in the area and/or visit New York City.

Special Admission

Advanced Placement An entering freshman who presents an outstanding score on an appropriate College Board achievement test, or who demonstrates advance standing qualifications by other acceptable evidence may, with proper approval, enroll in an advanced course not generally open to freshmen.

William Paterson College participates in the Advanced Placement Program of the College Entrance Examination Board (CEEB). In this program, high schools offer accelerated or honors courses on a college level to students in several fields: biology, chemistry, English, foreign languages, history, mathematics and physics. Examinations covering these courses are administered annually by the CEEB and are graded by the Board on a scale of 5–1. The College accepts scores of 5, 4 or 3 and awards credit and, if desired, placement in intermediate courses according to the achievement demonstrated.

Second Baccalaureate Degree Applicants for a second baccalaureate degree must have an earned baccalaureate degree from an accredited institution and a grade point average of at least 2.00. Second degree candidates are accepted on a space-available basis, as determined by the appropriate department.

Students accepted into this program register as undergraduates and are subject to all regulations affecting undergraduates.

The candidate must fulfill all requirements of the degree major and complete a minimum of 30 credits at WPC.

Early Admission The William Paterson College Early Admission Program is open to highly motivated high school students of exceptional academic ability.

Student applicants who have completed the junior year of high school may apply for early admission provided they meet the following criteria: combined SAT scores of 1,000 or higher, or the equivalent PSAT scores, and/or rank in the top 10 percent of their high school class, and/or exhibit exceptional talent in a special area; receive the endorsement of a teacher or counselor; and submit a written essay describing their reasons for seeking early admission. A personal interview is required of early admission applicants.

Readmission Students who wish to reenroll in the College following withdrawal or unofficial leave of absence are required to submit an application for readmission.

Procedures and policies governing the acceptance of previously earned credits toward current degree requirements will be outlined by the Admissions Office at the time the application for readmission is submitted.

The William Paterson College Program for High School Students William Paterson College offers its facilities to enrich the academic development of gifted and talented high school students in the north Jersey area. Outstanding high school juniors and seniors may apply to take regular college courses during the school year. Students attend regular college courses and earn credits that are applied to their college records. A student can make application for this special program by calling or visiting the Admissions Office or the Center for Continuing Education. Acceptance is based on SAT (1,000)/PSAT (100) scores, rank in class (top 10 percent), a letter of recommendation from a guidance counselor or principal. Successful applicants may also enroll for courses during the College's summer sessions. Students enrolling in this program cannot take any math or English courses unless they have taken the New Jersey Basic Skills examination.

International Students

William Paterson College, while having a primary obligation to serve New Jersey residents, welcomes applications from citizens of other countries. Residents of countries other than the United States or international students attending other schools in the United States on an F-1 visa are required to apply as international students. A special application is required for such applicants and may be obtained by writing or calling:

International Admissions Officer Admissions Office William Paterson College Wayne, N.J. 07470 USA (201) 595-2125

Proficiency in the English language is required of all applicants. Proficiency is measured by either the TOEFL (Test of English as a Foreign Language) or the SAT (Scholastic Aptitude Test) for people who speak English as their native language. All students, except those who are transferring from an English-speaking college or university with at least 24 transferable credits are required to take the appropriate test.

In addition, freshmen, i.e., students who have never gone to a college or university, must have a U.S. high school diploma or the equivalent from a foreign country, and all applicants must have demonstrated average or above average achievement in their past educational pursuits. An evaluation of all foreign credentials is required. Applications for the evaluation service utilized by William Paterson College are sent with the application for admission to the College.

Financial assistance is not available to non-U.S. residents. In view of this, international student applicants are required to provide evidence of their source of financial support for at least the first 12-month period of stay in the United States.

After acceptance to the College and payment of the acceptance deposit, the student is sent an I-20 form, which then must be presented to immigration officials in order to obtain a student visa.

Campus Visits

Prospective students and their parents are welcome on campus. Tours, conducted by WPC student guides, are scheduled on specific Friday afternoons and Saturday mornings. A copy of the admissions tour schedule is available from the Admissions Office, (201) 595-2125.

Fees and Financial Aid

Tuition, fees and refund policies are subject to change at any time in accordance with policies established by the New Jersey State Board of Higher Education.

Tuition and fee rates are published each semester and for the summer sessions in the master schedule of classes. Please consult the appropriate issue for current rates.

Undergraduate Tuition and Fees

Refund Policy Students withdrawing from a course must give written notice to the Registrar's Office. The date the Registrar's Office receives the written notice of withdrawal is used to determine any refund due. This does not apply to nonrefundable fees.

The refund schedule is as follows:

Withdrawal before the end of drop/add 100% Withdrawal during the first third of the semester . . . 50% Withdrawal after the first third of the semester. . . NONE

Dates for each of the above categories are published in the master schedule of classes each semester/session.

Tuition and fees are refunded in full when classes are cancelled by the College.

Late Fee Students paying tuition or fees late are assessed a late payment fee of \$15.

Orientation Fee Each new full-time freshman who is entering the College in the fall semester is required to pay a \$25 orientation fee.

Added Course Fee Students requesting program changes are required to pay an added course fee of \$15 for each course added after the regularly scheduled program adjustment. Students who were enrolled in the previous semester and who register late are charged an added course fee of \$15 for each course for which they register.

Partial Payment Plan Students previously enrolled may defer tuition during the first third of the semester. Students not previously enrolled may defer 50 percent of the tuition. Students granted a deferral are assessed a partial payment fee of \$15. Fees are not deferrable and an initial payment must be made for all fees, including the \$15 partial payment fee. Students who do not pay deferred tuition by the end of the first third of the semester are assessed an additional \$15. Student Parking The parking fee for automobiles is \$15 for the school year. The motorcycle fee is \$1. The fee is nonrefundable. Student cars and motorcycles without current decals permanently affixed are not permitted to park on campus.

Student Medical Insurance The current cost of voluntary student accident and sickness insurance is \$42 per year from September 1 to August 31. Coverage can also be purchased for a spouse or dependents.

Music Instrument Fee A music fee of \$5 per semester is charged for music instrument courses. The fee is nonrefundable.

Room and Board The current charge for residing on campus is \$1,100 in the Towers and \$1,200 in the apartments per semester. Students residing in the Towers are required to purchase a food plan. Students living in the apartments, Pioneer and Heritage Halls, are eligible to participate in the food plan but are not required to do so. Room and board rates are subject to change.

Financial Aid

Application Procedure for Financial Assistance Information regarding filing dates and procedures for applying for financial aid are given on the admissions application form. The Financial Aid Office, located in Raubinger Hall, may also be contacted for further information.

All applicants must obtain a New Jersey Financial Aid Form (NJFAF) from their respective high schools, furnish the required information and mail it to the College Scholarship Service, CN 6313, Princeton, N.J. 08541.

The student should request that the NJFAF be sent to William Paterson College.

Dependent students must submit to the Financial Aid Office a copy of their parents' 1040 income tax form from the previous year.

Independent students must submit a copy of their own 1040 form and should read the instructions on the NJFAF to determine whether an applicant is dependent or independent.

Budgets for the School Year (Nine

Months) Subject to change by the New Jersey Department of Higher Education.

Financial need can only be determined by individual case studies, but the expenses outlined below reflect average costs. Applicants are required to reapply for financial assistance annually. However, recipients normally receive assistance for their entire undergraduate career as long as they continue to demonstrate financial need and carry the required academic grade point average and credits. Budgets for independent students are adjusted according to federal guidelines.

Commuter Expenses
Tuition and fees\$1,766
Books and supplies
Other (recreation, personal,
transportation)
Total
Resident Expenses
Tuition and fees\$1,766
Books and supplies
Room and board
Other (recreation, personal,
transportation)1,600
Total

Eligibility

To receive aid, a student must:

- Be a citizen of the United States, or a permanent resident
- 2. Be accepted as a full-time/half-time matriculated student of WPC
- 3. Be in need of financial assistance
- 4. Plan to continue academic study for a bachelor's degree at the institution
- 5. Maintain the required grade point average
- 6. Not be in default on a Perkins Loan (NDSL), Guaranteed Student Loan or a PLUS loan
- 7. Not owe a refund on a Pell Grant or a Supplemental Educational Opportunity Grant.

All financial aid awards are based on need and are awarded without regard to race, religion, creed, age, sex or handicap.

Federal Sources

PELL Grants Grants are based on financial need determined by a formula approved by the Department of Education, which is applied consistently to all applicants. The formula uses the information provided on the NJFAF to produce a student aid index number. This student aid index number (not a dollar figure) is used along with the total cost of attending WPC part time or full time to determine the actual amount of the grant. Grants range from \$250 to \$2,100.

Eligibility for a PELL grant does not directly affect eligibility for any other campus-based aid. However, WPC, the state of New Jersey and federal regulations require that a student apply for a PELL grant before being considered for other aid. The U.S. Department of Education requires all applicants to answer "yes" to question 95 on the NJFAE

College Work-Study (CWS) This program provides jobs for students in need of financial assistance and permits them to work up to 20 hours per week.

An institution that participates in college work-study may arrange jobs on campus or off campus with a public or private nonprofit agency, such as a hospital. If eligible, students may be employed for as many as 40 hours a week.

In arranging a job and determining how many hours a week a student may work under this program, the financial aid officer takes into account: (1) need for financial assistance, (2) class schedule and (3) curriculum and academic progress.

Perkins Loans [formerly National Direct Student Loans (NDSL)] This program is for students who are enrolled at

least half time and who need a loan to meet educational expenses.

A student may borrow up to a total of: (1) \$4,500 if less than two years of a program leading to a bachelor's degree has been completed, (2) \$9,000 if an undergraduate has already completed two years of study toward a bachelor's degree (total includes any amount borrowed under Perkins Loan for the first two years of study), (3) \$18,000 for graduate study (total includes any amount borrowed under Perkins Loan for undergraduate study).

Repayment begins six months after graduation or departure from school for other reasons. A student may be allowed up to 10 years to pay back the loan. During the repayment period, 5 percent interest on the unpaid balance of the loan principal is charged.

There are four types of deferments: (1) volunteer service in a private, nonprofit, VISTA or Peace Corps-type organization, (2) service as an officer in the U.S. Public Health Service Commissioned Corps, (3) temporary total disability, (4) service in an internship preceding a professional practice.

The financial aid officer also has information about loan cancellation provisions for borrowers who enter fields of teaching or who teach in designated schools.

Supplemental Educational Opportunity Grants (SEOG) SEOG is for students with exceptional financial need who would be unable to continue their education without the grant.

A student is eligible to apply if enrolled at least half time as an undergraduate in an educational institution participating in the program. SEOGs cannot be less than \$100 or more than \$4,000 a year. Normally, an SEOG may be received for up to four years. However, it may be received for five years when the course of study requires the extra time. The total that may be awarded is \$4,000 for a fouryear course of study or \$5,000 for a five-year course. Graduate students are not eligible.

Guaranteed Student Loans (GSL) This program enables a student to borrow directly from a bank, credit union, savings and loan association or other participating lender willing to make the loan. The loan is guaranteed by a state or private nonprofit agency or insured by the federal government. All students must submit to a needs analysis test to qualify.

Depending on need, a student may borrow up to \$2,625 a year, if the student is a first or second year undergraduate student; \$4,000 a year if two years of study have been completed and third-year status is achieved with an undergraduate aggregate of \$17,250. Graduate or professional students may borrow up to \$7,500 a year with a cumulative aggregate of \$54,750. (A first time borrower—one with no outstanding GSL debt—pays an interest rate of 8 percent the first four years in repayment and 10 percent thereafter.)

PLUS (Parent Loans for Undergraduate Students) Parents may borrow up to \$4,000 per year to a total of \$20,000 for each child who is enrolled at least half-time and is a dependent student.

SLS (Supplemental Loans for Students) Graduate students and independent undergraduates may borrow up to \$4,000 per year, to a total of \$20,000. This amount is in addition to GSL limits. PLUS and SLS Borrowers do not have to show need; however, they may have to undergo a credit analysis. Interest is variable and is adjusted each year.

State Sources

Tuition Aid Grant (TAG) This program is for full-time undergraduates. To be eligible, a student must be pursuing a full-time academic program of study with a minimum of 12 credits per semester. TAG awards can be from \$200 to \$1,400. To be eligible for a Tuition Aid Grant, it is essential that a student file a NJFAF, which also calculates the PELL grant. A student must be a United States citizen, or a permanent resident, and be an established state resident for 12 months prior to receiving a Tuition Aid Grant.

Garden State Scholarship Program (GSS) These scholarships are awarded to students demonstrating high academic achievement and financial need. The awards are for full-time undergraduate study in New Jersey institutions of higher education and are renewable during the normal undergraduate period.

Grants range from \$200 to \$1,000. The exact amount is determined by the financial aid office and depends on a students financial need, taking into account family contributions and other aid received, the total of which may not exceed the students college budget.

Garden State Scholarship recipients must be continuous residents of New Jersey for 12 months immediately preceding receipt of the award. Each scholarship shall remain in effect only during the period in which the recipient achieves satisfactory academic progress as defined by the institution, continues to meet the established eligibility criteria and guidelines and is regularly enrolled as a full-time student in an approved institution. Garden State Scholarships are renewable annually for up to four years.

Educational Opportunity Fund (EOF) All students applying for admission to the Educational Opportunity Fund program must be determined to be eligible and be accepted for admission to the program. Grants range from \$500 to \$1,000.

Student Assistant Work Program (SA) Under this program, students with no apparent "need" may obtain employment on campus. Hours and pay rates are similar to CWS.

Public Tuition Benefit Program Dependents of policemen, firemen and volunteer first aid or rescue squad members killed in the performance of duty are eligible for free tuition at public colleges and universities in the state of New Jersey.

Enacted as law by the state legislature, the program, which began September 1, 1980, specifies that surviving spouses must attend college within eight (8) years from the date of the member's death, and surviving children must enter college within eight (8) years of the date of their high school graduation.

Distinguished Scholars Program Students demonstrating the highest level of academic achievement based upon their secondary school records and Scholastic Aptitude Test (SAT) scores are selected for consideration by their schools. From these selections, awards are offered to secondary school seniors who intend to enroll at a NewJersey college or university as full-time undergraduate students. Recipients must be residents of New Jersey. Financial need is not a factor in determining eligibility. Students selected as scholars may also be eligible for TAG, GSS and EOF.

Students accepting awards will receive \$1,000 per year throughout their undergraduate program. Scholar awards are renewable based upon satisfactory academic progress, continued undergraduate enrollment in a New Jersey college or university and continued program funding.

Students may not apply directly to the program. Candidates are selected for consideration by their secondary school based upon standard academic criteria. A committee reviews selections received from secondary schools in the fall of the students senior year in high school and identifies award recipients for the 1988–89 collegiate academic year. Interested students should see their guidance counselor for more information.

Urban Scholars Program The program recognizes academically able students graduating from secondary schools in New Jersey's urban and economically distressed areas. All Urban Scholars receive \$1,000 annual awards without regard to financial need. These awards are renewable for up to four years of undergraduate study at a New Jersey college or university. Recipients are designated as Garden State Distinguished Scholars. Students may not apply directly to the program. Candidates are selected for consideration by the appropriate secondary schools.

POW/MIA Program Child dependents of military service personnel who were officially declared "Prisoners of War" or "Missing in Action" after January 1, 1960, who are residents of New Jersey attending a New Jersey institution of higher education as an undergraduate may be eligible. Grants pay the actual cost of tuition charges incurred at any New Jersey public or independent college or university. Applications are available by calling toll-free 1-800-792-8670 or by writing the Department of Higher Education, Office of Student Assistance, CN 540, Trenton, NJ 08625. Application deadline: October 1 (for fall and spring terms) and March 1 (for spring term only).

Other Sources

Academic Excellence Scholarships William Paterson College makes available a limited number of academic merit scholarships each year. To be eligible, a student must be an undergraduate, have been in attendance for at least one semester and have a cumulative grade point average of 3.45 or better with a minimum 12-credit load. Students whose grade point average make them eligible will be notified in writing and invited to apply for an award.

Financial Rights and Responsibilities

Rights Students have the following rights:

- 1. To know what financial aid programs are available at the school
- 2. To know the deadlines for submitting applications for each of the financial aid programs
- To know how financial aid is distributed, how distribution decisions are made and the bases for these decisions
- 4. To know how the financial need was determined, including how costs for tuition and fees, room and board, travel, books and supplies, personal and mis-

GENERAL INFORMATION

cellaneous expenses, etc., are considered in student budgets

- 5. To know what resources (such as parental contribution, other financial aid, student's assets, etc.) were considered in the calculation of their needs
- To know how much of the financial need as determined by the institution has been met
- 7. To request an explanation of the various programs in the student aid package
- 8. To know the school's refund policy
- 9. To know what portion of the financial aid received must be repaid and what portion is grant aid. If the aid is a loan, students have the right to know what the interest rate is, the total amount that must be repaid, the payback procedures, the length of time available to repay the loan and when repayment begins
- To know how the school determines whether students are making satisfactory progress and what happens if they are not.

Responsibilities Students have the following responsibilities:

- 1. To complete all application forms accurately and submit them on time to the right place
- 2. To provide correct information. In most instances, misreporting information on financial aid application forms is a violation of law and may be considered a criminal offense which could result in indictment under the U.S. Criminal Code
- To return all additional documentation, verification, corrections, and/or new information requested by either the Financial Aid Office or the agency to which the application was submitted
- 4. To read and understand all forms they are asked to sign and to keep copies of them
- 5. To accept responsibility for all agreements they sign
- 6. To perform the work agreed upon when accepting a college work-study award
- 7. To be aware of and comply with deadlines for application or reapplication for aid
- 8. To be aware of the school's refund procedures
- To consider this information carefully before deciding to attend a school. All schools must provide information to prospective students about the school's programs and performance.

Questions Asked About Student Financial Aid

1. What is financial aid? Financial aid is any grant, loan, scholarship or offer of campus employment designed to make up the difference between what a student and his or her parents can afford and what it will actually cost to go to the College. Financial aid usually does not come from one source, but rather from a combination of programs. These awards are called "packages," and the total amount of a financial aid package is determined by the amount of financial need a student has and the availability of funds and programs available at the College.

2. How does one apply for financial aid? A student who wishes to apply for financial aid at William Paterson College is required to fill out and submit a New Jersey Financial Aid Form (NJFAF) to the College Scholarship Service. NJFAFs are available from the Financial Aid Office at William Paterson College or from high school guidance offices. This form should be filed by April if the student wishes to be considered for aid for the subsequent academic year, although forms submitted after this date will be accepted. A copy of the student's and/or parents' income tax form must be sent to the Financial Aid Office. It is important to file as early as possible, especially if the student expects to use financial aid awards to meet all or part of the term's bills. Awards are normally made for the full academic year.

3. What is financial need? The amount of money the student and the family can afford to pay for educational costs is called a "student's family contribution." A college budget consists of the amount of money required to attend college, including tuition, fees, books, transportation, housing, meals and personal expenses. Simply put, if the student's college budget is greater than the student's family contribution, the difference is that student's financial need.

4. How is a student's family contribution determined? A uniform method of needs analysis, developed by the College Scholarship Service and accepted and approved by the Department of Education, determines a student's family contribution for state funding. A congressional method of needs analysis, developed by Congress, determines a student's family contribution for federal funding. A standardized formula is applied to the information submitted to the College Scholarship Service by the student's family on a New Jersev Financial Aid Form (NJFAF). This formula takes into account a variety of factors, including family size, number of family members in college and certain debts. This needs analysis, including an expected family contribution, is forwarded to those colleges chosen by the student, as well as to any designated state or federal grant programs requiring this data.

5. Where do funds come from and how are they disbursed? There are four primary sources of financial aid: federal programs, state programs, institutional funds and private sources. The Financial Aid Office administers and coordinates all federal, state and institutional programs and notifies students as to the amount and type of aid in their award package.

6. Do financial aid awards have to be repaid? Grants or scholarships do not have to be repaid and, consequently, are regarded as "gift" aid. Loans must be repaid to the lender, but repayment is generally deferred until after a student completes his or her education. Campus employment income, paid to the student for work performed, does not have to be repaid.

7. Are there income levels above which students are not eligible for financial aid? There is no absolute cut-off for financial aid programs. Programs differ in their requirements, and a wide variety of factors is considered. In general, grants are awarded to students demonstrating the highest need. Student employment and government loans are more likely to be offered to students showing less need. Guaranteed Student Loans (GSL) are available to students who establish unmet need through a needs analysis test. All students who require even some assistance in meeting college costs are urged to apply for financial aid.

8. Must applications for aid be renewed each year? Yes, they must be renewed for each academic year. The information submitted on the New Jersey Financial Application Form must be resubmitted for each year aid is requested to be considered for all federal and state programs, as well as the work-study program.

Student Life

Recognizing the need for the social and cultural, as well as the academic development of the individual, WPC offers a wide range of activities to meet the needs and interests of the entire student body. Students directly participate in selecting, planning and implementing social and cultural events. Through participation in campus organizations and activities, students gain experience in governing their own affairs, accepting responsibility and learning to appreciate other people and their points of view.

Annual activities generally include Homecoming, Fall Fest, Spring Week, feature and art films, folk, rock and jazz concerts, lectures, dances, theatre presentations, art exhibits and many others.

Any student who wishes to participate on committees or join any club or organization may obtain information by contacting the director of student activities or the Student Government Association in the Student Center. All students are encouraged to participate in the activities of their choice, and membership in all clubs and organizations is open to all William Paterson College students regardless of race, religion, sex, national origin or handicap.

Government

Students are expected to participate in college decision making. All students are members of the SGA, the Student Government Association, which is funded by student activity fees. Four elected officers and various committees protect student rights and advance student causes.

The SGA is also responsible for chartering and funding campus organizations, which are divided into the categories of service, special, cultural and academic interest.

Additionally, the SGA retains the services of a professional attorney, who offers free consultation to students during weekly visits.

Student Center

The Student Center serves as the campus focal point for social, cultural and recreational activities for the entire college community. Students, faculty, staff, community members and alumni congregate here for a wide range of events and to use Student Center services and facilities.

Completely air-conditioned, it houses all of the dining facilities except the Wayne Hall Cafeteria. The College Bookstore is located here as is a full-service bank and an ice cream parlor. Other facilities include a ballroom, student offices, lounges and study rooms.

Clubs and Activities

Extracurricular life at WPC is largely sponsored by dozens of campus clubs—service clubs, cultural clubs, academic clubs and special interest clubs. The Student Activities Programming Board (SAPB) assists all of these groups in developing school activities and cultural events.

The SAPB is sanctioned by the Student Government Association and is solely dependent on student input. Membership is open to all interested students.

The SAPB is composed of the following committees, each sponsoring activities in its particular area: cinema, concerts, creative arts, entertainment, lectures and public relations.

Active Chartered Clubs

Anthropology Club Apartment Association Blacks in Business Black Student Association Bowling Team **Business Student Association** Calvary New Life Pentecostal Fellowship Catholic Campus Ministry Chess Club Chinese Club Christian Fellowship Club College Republican Federation Computer Society Creative Source Dance Ensemble Early Childhood Association Elementary Education Club English Club Equestrian Team Essence Literary Magazine Essential Appetite Training Galen Society (The Pre-Professional Club) Grand Illusion Club Health Science Club History Club Ice Hockey Team Inter-Fraternity/Sorority Council (IFSC) International Students Association Italian-American Club **Tewish Students Association** Math Club Men's Tennis Team Middle Eastern Students Association Music Students Organization Natural Science Club Nursing Club Okinawan Goju-Ryu Karate Club Once Again Students in School (OASIS) Organization of Latin American Students (OLAS) Organization of Minority Students (OMS) Outdoors Club People for Peace Pie-In-Airs Pioneer Players Pioneer Yearbook Political Science Club Society for Creative Anachronism Special Education Club Speech Pathology Club Student Accounting Society Student Art Association Student Mobilization Committee Students for Environmental Action Table Tennis Association Towers Life Committee WPC Coalition of Lesbians, Gays and Friends

Honor Societies

The College sponsors a number of honor societies in various disciplines. They are: Omicron Delta Epsilon: economics Phi Alpha Theta (Tho Alpha Chapter): history Kappa Delta Phi (Zeta Alpha Chapter): education Pi Lambda Theda (Beta Chi Chapter): women in education Alpha Kappa Delta (Gamma Chapter): sociology Nursing Honor Society: nursing Psi Chi: psychology

Inter-Fraternity/Sorority Council

The IFSC is the umbrella organization for social fraternities and sororities at WPC. It sponsors campus-wide events and champions social responsibility among its member organizations. Currently, there are 12 social fraternities and sororities on campus.

Service Clubs

The Beacon, the weekly college newspaper published by students whose aim is to present and interpret news of college activities and to serve as a medium for the expression of student opinion, has several times been awarded first place in the college division of the Columbia Scholastic Press Contest.

Helpline/Drop-In Center (201) 956-1600 in the Student Center 3D4, Monday–Thursday, 11:00 a.m.–5:00 p.m., and (201) 595-2736 or -2737 in the Towers A24, Tuesday–Thursday, 6:00 p.m.–9:00 p.m. A volunteer student service designed to answer the particular kinds of questions college students have about themselves and the college. These questions can be of an intenselv personal nature, such as drug or alcohol dependence or sexual matters, or about registration, financial aid or courses. Trained students provide counseling for all students and complete confidentiality is guaranteed.

Pioneer Yearbook A college annual which provides an overall pictorial and editorial record of the activities of the college year and senior class.

WPSC Radio Students have the opportunity to learn the many facets of radio through practical experience and can participate in broadcasting music, news and sports, as well as learn about advertising, engineering and audio production. WPSC, located in Hobart Hall, is also carried on UA Columbia Cablevision. Women's Center Women from the College community seek to promote the interests of all women on campus and to heighten awareness of the emotional, social and political pressures women face. The Women's Center is located in Matelson 262.

Activities, functions and services include a student sexual health clinic, consciousness-raising groups, peer and career counseling, academic advisement, women's studies courses, lectures and poetry readings.

Alcohol Review Board

The ARB is charged with overseeing responsible use/consumption of alcoholic beverages on the WPC campus. Representatives are elected from students, faculty and administration. The Alcohol Control Committee reports to the ARB under the supervision of the dean of students.

Sports and Recreation

The College offers a wide range of intercollegiate, recreational and intramural activities throughout the academic year. A full-size heated pool for swimming and diving is located in Wightman Gym. There are, as well, eight tennis courts, a light-equipped outdoor athletic complex with fields for baseball, field hockey, football, soccer and softball and a permatrack.

Intercollegiate Athletics William Paterson College is a member of the highly competitive New Jersey State Athletic Conference, the Eastern Collegiate Athletic Conference, Jersey Athletic Conference, National Collegiate Athletic Association and the New Jersey Intercollegiate Athletic Association for Women. All teams are Division III and offer no athletic scholarships.

The College offers 18 intercollegiate varsity sports for men and women. In addition to these, there are two coed sports, equestrian and dance, with ice hockey, ski racing, wrestling and men's tennis organized on a club basis.

Men's varsity sports include baseball, basketball, cross country, fencing, football, golf, soccer, swimming and track. Women's varsity sports include basketball, cross country, fencing, field hockey, softball, swimming, tennis, track and volleyball.

Rec Center Designed to serve as the focal point for physical recreation activities, the Rec Center contains indoor courts for basketball, tennis, racquetball, volleyball and badminton. There is a weight and exercise room; saunas and Jacuzzis are located in each locker room. The Center can also accommodate 4,000 spectators for concerts or exhibitions.

Academic and Institutional Support Services

The Advisement Center Located in Wayne Hall, the Advisement Center fulfills two important campus needs:

- The need for an information and referral service for students with general academic questions and problems
- The need for more personalized advisement services for students who have not yet decided on a major and for students who are unhappy with their major and need to explore alternatives.

Students who need answers to routine academic questions can visit the Academic Information Counter, located just inside the doors of the Advisement Center in Wayne Hall, Room 138. Staffed with specially trained student assistants called "Peer Advisors," the Academic Information Counter is available to students on a drop-in basis from 9:00 a.m.–7:00 p.m., Monday–Thursday, and 9:00 a.m.– 5:00 p.m., Friday, during the fall and spring semesters, and from 9:00 a.m.–5:00 p.m., Monday–Thursday, during the summer.

In addition to having their questions answered, students can obtain the following materials: catalogs, curriculum control sheets for over 40 different majors, schedule of classes booklets, academic department brochures and fliers and many other items of interest.

Students who need in-depth advice can schedule an appointment to see a faculty advisor. Upon admission to the College, each student is assigned a faculty advisor to provide assistance with curriculum planning appropriate to the major course of study, as well as various types of problems. These problems may range from helping students calculate their grade point average to explaining the general education curriculum requirements. Sometimes a session may cover more comprehensive concerns, such as "Why am I in college?" and "What do I hope to obtain from a college degree?" Day and evening appointments are available.

In addition to conducting individual advisement sessions, the Advisement Center periodically sponsors workshops on decision making and selecting a major. The center also operates an Academic Hotline for quick questions, telephone 595-2727.

Declaration/Change of Major(s) Students may declare or change one or more majors after completing at least one semester at William Paterson College. The following procedures must be followed in order to obtain a change of major:

- The student completes the first section (official copy) of the declaration/change of major(s) application available from the Advisement Center
- 2. The student takes the first section (official copy) to the chairperson for an interview and signature
- 3. The student returns the signed first section (official copy) to the Advisement Center before the deadline stipulated on the form.

Students should declare a major no later than the end of the sophomore year.

Center for Academic Support The Center for Academic Support provides tutoring for the general college population and academic counseling and advisement for specialcategory students.

Anyone in need of academic assistance should apply directly at the facility. The center is located between Raubinger Hall and the Coach House. There is no charge for services to all registered WPC students.

Counseling Services The Office of Counseling Services offers a wide range of counseling services to students. Staff members trained in clinical and counseling psychology are available to meet with any student who requests personal counseling.

Psychological counseling interviews are private and totally confidential. Initial interviews are arranged within a few days of a student's request. Emergency situations, of course, are handled immediately.

A psychologist or counselor is available, without charge, to discuss any deep personal conflicts that may be preventing a student from moving forward and achieving goals. Both short-term individual and group psychotherapy are offered.

Institutional Support Services

Alumni Association Every student who earns a degree from William Paterson College is automatically a member of the Alumni Association. The association maintains contact with alumni; informs alumni about college developments; produces the alumni newspaper; coordinates alumni events, such as Homecoming and spring reunions; sponsors the Athletic Hall of Fame, Distinguished Alumni Awards and the Student Awards Assembly; awards dozens of scholarships each year and promotes the interests of the College.

Upon graduation, all alumni receive identification cards, enabling use of many college facilities that were available to them as students.

Alumni may attend athletic events and use recreational facilities, have library borrowing privileges, may attend student events, have access to the Student Center and much more.

The Alumni Association is financed through an annual fund drive, which solicits contributions from all alumni. The association's annual phonathon is one of the annual fund drive activities.

Campus Ministry In recognition of the various religious backgrounds present in the college community, clergy from the major faiths are on campus for counseling.

Career Services The Office of Career Services provides a comprehensive career development program designed to assist students and alumni in making appropriate career choices and in developing plans to achieve their goals. To maximize potential and marketability, students are encouraged to take advantage of services early in their college careers.

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Personalized Career Guidance: Professional counselors are available during day and evening hours for individual appointments. Decision making, career pathing, critiquing of résumés, preparing students for interviews and discussing the job market are just a few areas that staff members are equipped to handle.

Testing: A complete battery of vocational tests is administered and interpreted by counselors.

Workshops: Each semester an extensive job readiness and career planning workshop series is offered, which includes sessions covering the following topics: career decisions for the undecided, exploring careers in your major, pre-law seminar, résumé writing, interview techniques, job search strategies, careers in federal and state government and the versatility of a teaching degree.

Credential Services: Provides seniors and alumni an opportunity to maintain a reference file. The office will forward credentials to prospective employers and graduate schools at the student's or employer's request.

Recruiting: On-campus interviews are available for seniors with employers from government, education and industry in the spring of each year.

Career Column: A biweekly column appears in the college newspaper describing the office's activities, services and career information.

Career Conferences, Graduate Schools and Job Fairs: Conferences are scheduled periodically for students to meet and discuss career-related information and opportunities with employers and graduate school representatives.

Job Location and Development Program (JLD): Counselors assist students in securing part-time, summer and temporary off-campus employment. Primary emphasis is on development of career-related positions and paid internships.

Career Library: An up-to-date resource center with information such as career books and literature, job hunting directories, full-time, part-time and summer job listings, company literature, local, state and federal job opportunities, graduate school information and catalogs and salary surveys.

Audiovisual Equipment: Instructional video-cassettes are available for student use.

Computer Technology: An easy-to-use computerized guidance system is available to aid students in the career decision-making process. A computerized job matching system is currently being developed.

Child Care Center The WPC Child Care Center, located in Hobart Hall, is open from 8:00 a.m.–5:00 p.m., Monday– Friday. Children of full- and part-time students, faculty and staff are accepted on a first-come, first-served basis, provided they are between two and one-half and five years old, toilet trained and self-sufficient. The curriculum at the center concentrates on social, personal, emotional, physical and cognitive development. Further information may be obtained by telephoning 942-8348.

Disabled Student Services The Office of Student Program Development coordinates services for disabled students, including assistance in registration, advisement, parking, referrals and other special needs. Health Services/Insurance The Health Office in White Hall, open from 7:30 a.m.–11:30 p.m., Monday–Friday, and staffed by three full-time nurses and a daily part-time physician, serves the medical needs of students. Each student is required to submit a self-evaluation medical history form prior to entry. Periodically, students are required to submit evidence of freedom from tuberculosis. An examination by the college physician may be required of any student at any time to determine whether the student's physical condition warrants continuing in college.

Students and their parents are urged to enroll in the insurance plan. Family insurance often does not cover children after their 19th birthday. The policy offered is in force, regardless of family policies, 24 hours a day, 12 months a year. Instructions can be obtained at the Health Office.

Veterans Affairs The Office of Veterans Affairs provides services for veterans, or dependents of deceased or disabled veterans.

Supportive counseling and referral services and supplemental academic assistance are available to all veterans regarding personal/social and financial readjustment, tutorial aid and refresher coursework.

The educational assistance program administered by the Veterans Administration provides financial aid for the education of all eligible veterans. The College provides direction and serves as a certifying agency with regard to veterans educational benefits and/or dependents' educational assistance.

Residential Facilities

Residential life at WPC is based on the belief that oncampus living provides a unique opportunity for students to gain a variety of personal learning experiences which supplement and complement the formal learning which occurs in the classroom. The goal of the residence life program is to develop an environment that supports students' academic endeavors and promotes individual development. It is expected that students will contribute positively to the on-campus community as involvement is paramount to personal fulfillment and growth. The program seeks to make the residence halls a place where students can:

- --Meet other students and live successfully with others
- --Assume responsibility for their own lives and the living environment
- --Participate in a variety of educational, social and cultural activities
- Develop leadership skills through participation in residence hall government, social and judicial organizations.

The College provides two types of housing for students, the Towers and Pioneer and Heritage Halls.

Towers The Towers is a large, modern facility designed to accommodate 1,000 underclassmen. Two double-occupancy rooms are connected by a bath and together constitute a suite housing four persons. A limited number of single-occupancy rooms are also available. Each room is furnished to include beds, desks, chairs, wardrobes and drawer space. Students are responsible for their own linens and personal effects. Located within the pavilion which connects the Towers is a spacious lounge and recreation area. Individual floors also have lounge and study space. Laundry, television and vending facilities are also located in the building.

Pioneer and Heritage Halls Pioneer and Heritage Halls offer apartment-style living for upperclassmen (juniors, seniors and graduate students). Each apartment is designed to accommodate four students. Each apartment contains two bedrooms, a full bath, kitchen and living/ dining area. The apartments are furnished with closets, desks, beds, chairs, a dinette set, sofa and occasional furniture. Students are responsible for their own cooking utensils, linens and personal effects. Study and recreation lounges, laundry and vending facilities are also available.

Residence Life Staff Each of the residence hall areas is administered by a live-in resident director who is a fulltime member of the Student Services staff. The "R.D." is responsible for the overall operation of the hall, supervises the resident assistant staff and coordinates educational, cultural, social and recreational programs and student advisement.

The resident assistant is a fellow student who has received extensive training to work with students. The "R.A." is one of the first people to greet students when they arrive on campus. An upperclassman selected for his/her special personal qualities and dedication to serve fellow students, an R.A. lives on each floor and seeks to enhance the community spirit essential to the residence halls. R.A.s are knowledgeable about the College and its resources and are trained in counseling and advisement skills.

Dining Services Students living in the Towers are required to be on the meal plan each semester. Apartment residents may either use the cooking facilities in their apartment or choose a meal plan arrangement. Major college dining facilities are the Wayne Hall Cafeteria and the Student Center Restaurant. Billy Pat's Pub is the focal point for campus entertainment and gatherings. Food is also available in the Snack Bar and the Sweet Shoppe.

Activities and Programs The Residence Life staff together with students plan dances, outings, dinners, lectures, study workshops, movie nights and a host of other events that take place on weekdays and weekends. Resident students traditionally are enthusiastic participants in these programs. Outdoor tennis courts, football, baseball and softball fields, in addition to a fully equipped recreation center, are a short walk from the residence halls. Wightman Gym houses a heated Olympic-sized swimming pool and a basketball court. For jogging enthusiasts, a quarter-mile track rims a section of the campus.

The Office of Student Activities also works closely with the Residence Life staff in coordinating programs and events. In short, students can always find some extracurricular activity in which to get involved. Religious services for all denominations are conducted through the William Paterson Christian Fellowship. The Catholic Campus Center serves many residents and invites students to use the Center. The Jewish Student Association also encourages participation by resident students. Many churches and synagogues are conveniently situated near the campus. Rides are available by directly contacting the church or synagogue.

Health Insurance and Medical Services All residents are required to provide proof of health insurance. This can be done by submitting proof that a student is still covered under his/her parents' health plan or by purchasing the student health insurance available through the College. Proof of insurance must be provided before students are permitted to move into the residence halls.

The College also provides free medical services through the Student Health Center conveniently located next to the Towers complex and supervised by a medical director, part-time physician and full-time nurses.

Financial Matters Room rates are quoted on a per person academic year basis. The residence agreement is signed for the full académic year. Students are billed on a semester basis. The semester's room payment is due in full before a student is allowed to move into the residence hall. In addition, proof of payment for the meal plan is required of all Towers' residents.

Off-Campus Housing Many students choose to live off campus. A full list of off campus vacancies in local homes and apartments is maintained by the Residence Life Office and is available on request. Arrangements regarding rent and regulations are negotiated directly with the landlord.

Academic Regulations

Every student is expected to know and comply with policies and regulations stated in this catalog. Students are also expected to be aware of and responsible for their scholastic standing at all times, as well as for the appropriate number of credits accumulated toward the number required for graduation.

The College reserves the right to introduce changes in the rules regulating admission, programs and instruction and graduation. Changes go into effect when determined by the proper authorities and apply to prospective students as well as to those already enrolled.

The administration of academic regulations is the function of the dean of each school. A student may request in writing, through the department chairperson to the appropriate dean, an exemption from or waiver of a particular academic regulation.

Attendance

Students are expected to attend regularly and punctually all classes, laboratory periods and other academic exercises. Students are responsible for all work required in courses. The instructor will determine the effect of absences upon grades and may permit or deny the privilege of making up work, including examinations, within the time limits of the semester.

In the event of a prolonged absence, a student is advised to consult with the Office of the Dean of Students.

Grades

A, A –	Excellent
B+, B, B-	Good
C+, C, C-	Satisfactory
D+, D	Minimally passing
F	Failing
Р	Passed course, taken on a pass/fail basis
	(equivalent to A-D)
S	Satisfactory (Basic Skills courses, not for
	graduation credit)
INC	Incomplete
N	Unacceptable, must repeat (Writing
	Effective Prose and Basic Skills)
М	Missing, no grade submitted
WD	Withdrawn officially
AU	Audit

Grade Point Values

Α	4.0
A	3.7
B+	3.3
В	3.0
B-	2.7
C+	2.3
C-	1.7
D+	1.3
D	1.0
F	0

Grade Regulations

A report of the students grades is entered on the official record and is altered only upon the initiation of the instructor and the approval of the department chairperson and the appropriate dean, except under extraordinary circumstances. In some cases, the privilege of re-examination is permitted.

- 1* a. Currently enrolled, undergraduate, first-degree students may repeat once any course in which a passing grade less than C- is received
 - b. A course in which a failing grade is received may be repeated until a passing grade is obtained
- 2. Only the last grade will be counted in the GPA
- 3. ALL grades will be shown on the transcript
- 4. Courses taken over will have a notation on the transcripts that the course was repeated and that this grade is not counted in the GPA.

*Note: A student may be precluded from repeating courses in instances in which this policy conflicts with other academic College policies or licensing requirements by outside agencies.

All grades of INC not changed by the appropriate time to a letter grade upon the recommendation of the proper faculty member are automatically changed to a grade of F by the registrar. Seniors, during their final semester, are not awarded incomplete grades. This permits the evaluation of eligibility for graduation prior to the close of the final undergraduate semester.

Class Standing

Class standing is determined by computing the total credit hours earned.

Sophomore—one who has earned at least 24 credits. Junior—one who has earned at least 58 credits.

Senior-one who has earned at least 90 credits.

Pass/Fail Option

- 1. Students may register for only one course per semester with a pass/fail option.
- Students may register for no more than four courses with a pass/fail option during their academic careers.
- 3. The pass/fail option may be used for free elective courses and general education courses, except Writing Effective Prose. It may not be used for major or minor courses or directed electives. (This count does not include any general education, elective or major courses which can only be taken pass/fail.)
- 4. A pass/fail grade of P will be considered the equivalent of A to D. A pass/fail grade of F will be considered the equivalent of F

Students who exercise the pass/fail option must indicate such intention at the time of registration and are not permitted to change their intention after the registration period is complete. Nor may students who have registered for a course be permitted to change their minds and exercise the pass/fail option after the registration period.

A grade of P shall count in the number of credits earned, but not in the cumulative grade point average. A grade of F counts in the grade point average.

Students who wish to exercise the pass/fail option are reminded of certain limitations in the concept and of potential difficulties which they may encounter. Not only are grades of P not counted in the student's grade point average, but also the student may find that grades of P are not transferable to other colleges and may not be recognized by some graduate schools.

Credit

A credit is a unit or measure of curricular work. Generally, a credit is awarded for one hour of class attendance a week for one semester. In some studies, such as studio or laboratory courses, several hours may be required to earn one credit.

Procedures for Investigating Complaints About Grades or Student Academic Performance

Students who are dissatisfied with treatment by a faculty member in reference to grades or student academic performance should pursue the following procedure:

- Speak directly to the faculty member within 10 working days of the receipt of grade or incident related to student academic performance. If, after repeated attempts, a student is unable to reach the faculty member within 10 working days, the student must notify the department chairperson in writing within that 10 working-day period
- 2. If, after discussion with the faculty member, the student is dissatisfied with the outcome, the student should contact the department chairperson presenting a dated, written statement describing the specific basis for the complaint. The written material must include any pertinent documentation to substantiate the student's complaint. At this time, the student will also provide the faculty member with a copy of these written materials
- 3. The department chairperson will try to resolve the issue by reaching a settlement which is agreed upon by both the student and the faculty member. If the issue is not resolved at the chairperson's level, the student should request that the department chairperson convene the Department Executive Council (or other appropriate department committee) to hear the appeal, consult with the faculty member concerned, then submit a decision to the department chairperson. When the faculty member involved is the chairperson, the student may request that the dean of the school convene the Department Executive Council (or other appropriate department chairperson).
- 4. If not satisfied with the Department Executive Council's (or other appropriate department committee's) decision, the student may ask the dean of that school to bring the matter to the School Council for a decision by

- the departmental chairpersons of the school concerned. This will constitute the College's final decision. The chairperson of the department concerned will not take part in the final vote
- 5. Each step in the procedure must be initiated within 10 working days of the faculty or department response. Dated, written statements are required at each step. Likewise, at each level, the faculty member(s), chairperson or Department Executive Council (or other appropriate department committee) must complete a review of all pertinent written materials prior to rendering their decision, in writing, within 10 working days of receipt of complaint materials. In case the faculty member has verifiably been unable to be contacted, or in other instances of extenuating circumstances affecting students or faculty, it is understood that the student's right to appeal will not be jeopardized, and the time constraints will be extended. Due process must be followed at each step of this procedure. No grade will be changed by anyone other than the faculty member who assigned it unless there is convincing evidence that the assignment of the original grade was inconsistent with professional standards in the discipline
- 6. Each student who registers a complaint with a department chairperson must be given a copy of this policy. A copy must be attached to the appeal and signed by the student to indicate that he/she has been given a copy of this procedure, has read it and understands it before the appeal can proceed.

Course Credit Load

Full-Time Students The normal registration for any semester is 15 credits, although up to 19 credits in some major programs may be carried without special approval. Registration for more than this number of credits per semester is permitted only under unusual circumstances and requires high academic standing and written approval of the student's advisor, department chairperson and the appropriate dean.

A student must be registered throughout the semester for a minimum of 12 credits to be considered full time. A student who registers for a minimum full-time load and then withdraws from courses, bringing the credit load below the minimum full-time requirements, relinquishes full-time status.

Part-Time Students Students carrying less than 12 credits are part-time students.

Nondegree Students The nondegree student is limited to part-time enrollment each semester and may take a maximum of 24 credits as a nondegree student. To proceed beyond this maximum, the nondegree student must apply for formal acceptance to a program through the Admissions Office.

Presession and Summer Session Students who register for the four-week presession may not carry more than 3-4credits during the session. Students who register for the regular six-week summer session may register for a maximum of 9–10 credits. This policy of maximum load applies equally to all students.

Academic Standing

The policy on academic standing is that approved by the Board of Trustees on August 30, 1976. The basic principle is that any student whose grade point average falls below 2.0 is no longer in good standing. The guidelines below display what constitutes "good standing," "probationary" and "dismissed" status.

Procedures Determination of student academic standing is made once a year, after completion of the spring semester. Students bear the responsibility for remaining in good standing. The College is under no obligation to warn students about academic deficiencies or to alert them about probationary status when their cumulative grade point average drops below 2.0.

Dismissal After annual determination of student standing by the registrar, dismissed students may no longer take courses. Dismissed students who have registered for new courses prior to receiving a dismissal notice will have their tuition and fees refunded and will be withdrawn from the courses. Appeals of dismissal decisions may be made in writing to the appropriate dean through the registrar. These must be filed within seven days after receiving a letter of dismissal. It is the responsibility of the student to provide additional information or documentation beyond the grade point average itself which might warrant reconsideration and, perhaps, reinstatement. Appeal decisions should be rendered by the appropriate dean no later than August 15.

Grade Point Average A student's academic standing is indicated by the grade point average. The average is determined by dividing the total number of grade points earned by the total number of credits attempted. Courses graded INC, WD, and P are not computed in determining the grade point ratio. A = 4.0; A - = 3.7; B + = 3.3; B = 3.0; B - = 2.7; C + = 2.3; C = 2.0; C - = 1.7; D + = 1.3; D = 1.0; F = 0

Example:

	Credits Attempted	Credits Earned	Grade	Grade Points
Organic Biochemistry	4	4	Α	16
Creative Writing	3	3	A	12
Origin of Cities	3	3	С	6
Abnormal Psychology	3	3	в	9
Social Movements	3	3	D	3
Independent Study	0	2	Р	0
	16	18		46

Grade Point Average = 2.87

Only courses taken at William Paterson College are computed in determining the grade point average.

For graduation, the minimum grade point average requirements are 2.0 cumulative and 2.0 in the major field. Seniors who fall below a 2.00 cumulative grade point average during the senior year are permitted to take additional courses for a limited period of time, usually one semester or term, to achieve a satisfactory average. Seniors who fall into this category are notified of probation or dismissal and must see the appropriate dean for consideration about continuing.

Reinstatement Any student who, upon appeal, is reinstated is subject to such terms and limitations which are conditions to reinstatement. A student's eligibility for cocurricular or extracurricular activities is determined by the sponsor of such activities, following appropriate approval procedures.

Withdrawal from the College Withdrawal from the College can be initiated at any time.Withdrawal is defined as an indefinite separation from the College. The form for Withdrawal from College is obtained from the Office of the Dean of Students and must be returned to the Office of the Dean of Students.

Students who have withdrawn and wish to return to the College must apply for readmission through the Admissions Office. Readmission is not automatic; enrollment and other considerations may not permit return at that time.

Leave of Absence A student who finds it necessary to leave college for one or two semesters must apply for an official Leave of Absence through the Office of the Dean of Students. The student must be in good academic standing in order to be considered for the leave of absence.

Scholastic Regulations The College expects students to be aware of, and to be directly responsible for, their academic progress. A student who is experiencing academic difficulty is advised to consult first with the faculty member directly concerned. If for some reason the problem cannot be resolved, the student should consult the assigned academic advisor.

Upon admission to the College and to a major program, students are given a work program outlining particular requirements and recommending the sequence in which they should pursue those requirements. It is the students' responsibility to maintain the work program, keep it updated and have it available each time they consult with their academic adviser and register for the new semester. Students who misplace or lose the work program may obtain a new copy from the Office of Advisement and must pay the standard fee if a transcript of grades is needed to complete the new copy of the work program.

Credits Attempted	Good Standing	Automatic Probation	Dismissal
23 credits or less*	2.00 or better	Not applicable	Not applicable
24 to 30 credits	2.00 or better	1.99 to 1.20	1.19 or less
31 to 60 credits	2.00 or better	1.99 to 1.70	1.69 or less
61 to 90 credits	2.00 or better	1.99 to 1.90	1.89 or less
91 to graduation	2.00 or better	 Under 2.00 with one 	1.99 or less after the
		semester or term	grace semester of
		to achieve a 2.00	term to achieve a
			2.00

General Curriculum Requirements

To qualify for an undergraduate degree at William Paterson, a student must earn a minimum of 128 credits, achieve a minimum 2.0 cumulative average and 2.0 major average. In most instances, the 128 credits will include:

- 1. Approximately 60 credits in general education, most taken during the first two years; 30–40 credits in an area of specialization (major)
- 2. 10–40 credits in elective courses, taken throughout the last three years of study.

Students must take responsibility for making sure that their selection of courses meets the requirements of their chosen degree program; they should consult regularly with their faculty advisor for guidance.

This pattern may be varied by obtaining credit through advanced standing or placement, special and challenge examinations, the College-Level Examination Program (CLEP), the College Proficiency Examination Program (CPEP) and for military training and experience.

These opportunities are described in detail under Curriculum Individualization ahead.

Generally, electives may be chosen entirely on the basis of interests. They may be taken to complement general education requirements, develop a minor in another area, qualify for a vocational certification, increase competence in the major, prepare for graduate study or to satisfy curiosity.

To take a course which has a prerequisite, a student must successfully complete the prerequisite, or obtain special permission from the academic adviser to take the elective without the prerequisite.

Freshman Basic Skills Program

On March 18, 1977, the New Jersey Board of Higher Education mandated a basic skills program to test all entering students in state public colleges and to provide remediation in reading, writing and mathematics for those students whose performance on tests in these areas is unsatisfactory according to current college standards. Assessment of basic skills is made through the administration of the New Jersey College Basic Skills Placement Test, which consists of the following: essay reading comprehension, sentence sense, computation and elementary algebra.

Tests are required for students who are accepted as new freshmen, for transfer students who have not taken these tests or completed equivalent English/mathematics courses, for international students and for nondegree students registering for the 12th credit.

Students needing remediation are placed in appropriate courses to develop essential academic skills during the first semester. These courses are required and are prerequisite to all other English and mathematics courses. Students requiring remedial work in reading and/or writing may not register for more than 12 credits per semester, including remedial courses, until they have completed these requirements. Students requiring remedial work in mathematics only may not register for more than 15 credits per semester, including remedial courses, until they have completed these requirements. Basic skills courses carry college credit, but do not count toward the credits required for a baccalaureate degree. Credits earned in remedial courses are included in determining students' classification (e.g., sophomore, junior, senior) and in defining full-time student status.

To continue at the College, students must either achieve satisfactoy scores on the basic skills placement test, or complete assigned remedial courses successfully before enrolling for their 46th credit.

Before students may enroll in ENG 110, Writing Effective Prose, or advanced mathematics courses, they must pass any required basic skills courses in the appropriate areas.

All students must earn a grade of C or better in ENG 110, Writing Effective Prose. Normally, students meet this requirement in the freshman year and must meet it before start of the junior year. Students whose first language is not English, as determined by a standard test (TOEFL) score, must pass ESL 101 and ESL 102, English as a Second Language, before enrolling in either regular or specially designated sections of ENG 110, as determined by a professor's evaluations or placement tests.

Undergraduate Degree Requirements

Undergraduate degree programs at William Paterson College are comprised of coursework in general education, concentration in a major and elective courses, totaling a minimum of 128 credits. Some degree programs require more than 128 credits for graduation.

General Education The goal of general education is to provide broad, coherent knowledge for the development of the individual and his/her participation as a citizen in society. Common knowledge is needed to foster critical and creative thinking, effective writing and communication and the formation of humanistic values.

To this end, general education courses introduce the student to basic concepts and methods in major fields of knowledge. The collective aim of these courses is to develop an appreciation of literature and the arts, an understanding of the natural world and knowledge of our own and other societies and cultures.

Approximately 60 credits of general education coursework must be completed for the bachelor of arts and bachelor of science degrees. General education requirements differ for students receiving the bachelor of fine arts or bachelor of music degrees.

General Education Requirements The general education requirement is divided into two parts: the basic general education requirements (53–54 credits) and the general education electives (6 credits).

	SIC GENERAL EDUCATION QUIREMENT	59-60 CREDITS	
	Arts and Communication	6 credits	
A.		o creuts	
	Art Music		
	Theatre		
	Communication	alian to oper domant	
	(No more than 3 credits may be t	aken in any depart-	
	ment.)	21 dia	
B.	Humanities	21 credits	
	Writing Effective Prose	3.	
	Foreign Language	6	
	History	6	
	Literature	3	
	Philosophy	3	
C.	Science	11–12 credits	
	Mathematics	3-4	
	Science	6–8	
	(4 credits if a lab course)		
D.		9 credits	
	Anthropology		
	Geography		
	Political Science		
	Psychology		
	Sociology		
	Economics (from the School of Management)		
	(No more than 3 credits may be tak	•	
E.	Other	6 credits	
	1. A course in health or		
	movement science	3	
	2. A course dealing with		
	racism and/or sexism in		
	America	3	
F.	GE Electives	6 credits	
	Chosen from a group of upper-le		
	courses; these may not be in the	major or collateral	
	areas.		
G.	Non-Western Culture	3 credits	
	May be fulfilled by a course in a		
	GE, elective); is not an additiona	l general education	
	credit requirement.		
Ma	ijor Courses A student should pur	sue a discipline or	
1440	jor courses a sudent should put	suc a uscipinic Of	

Major Courses A student should pursue a discipline or course of study in sufficient depth to be acquainted with both the basic body of knowledge therein and the frontiers to which it reaches. Credit requirements for major areas of concentration vary according to type of program. Courses applied to a major may not be used to fulfill general education requirements.

- 1. In a bachelor of arts program, major courses total between 30 and 40 credits.
- 2. In a bachelor of science program, up to 60 credits may be required.
- 3. In specialized degree programs, such as the bachelor of fine arts and the bachelor of music, major course requirements may exceed 60 credits.

Elective Courses

- 1. Nine (9) credits of upper-level electives (200- or above) outside the major, collateral areas and above the 100-level.
- Free elective courses—students are encouraged to explore areas of study not included under the general education designation and not included in the major, collateral areas course of study.

Waivers from college curriculum requirements are provided, when deemed necessary. When the need for a waiver arises because of requirements for mandated courses set by an outside accrediting agency, priority is given to the requirement of the accrediting agency. A student who requests a waiver should apply to the major department chairperson, who then forwards the request to the appropriate dean.

The remaining requirements are stipulated by the major department and/or school. See also Credit by Examination for complete explanation.

Policy on Independent Study

The purpose of the undergraduate independent study program at William Paterson College is to encourage selfeducation under the auspices of a faculty supervisor. The program is open to junior and senior students who have shown themselves responsible and capable of self-direction and who possess a grade point average of at least 3.0, both overall and in the major, or in the field of the independent study. Independent study cannot substitute for an existing course, but may be utilized in lieu of a degree requirement.

A student cannot undertake an independent study for which the student has had no background. The choice of topic for an independent study should be initiated by the student.

An application form, with a one-page prospectus, should be submitted to the sponsoring faculty member. The application form requires the approval of the faculty member, the department chairperson and the dean of the appropriate school. The completed application must be submitted by the dean to the registrar no later than the late registration period for the semester in which the independent study is to be undertaken. This deadline may be moved to an earlier time at the discretion of a department. The prospectus should include:

- 1. Statement of the purpose of the project
- 2. Description of the proposed methodology to be used in carrying out the independent study
- 3. A brief preliminary bibliography
- 4. A proposed time schedule
- If the project is expected to continue for two or more semesters, it should be clearly stated which part of the proposed work should be completed by the end of each semester
- 6. Description of the final product which will be evaluated for independent study credit.

Three credits of independent study may be undertaken in a given semester; no more than 9 credits of independent study may be credited toward degree requirements. Credit and grade are awarded by the faculty sponsor.

Multiple Major Courses of Study

A student can select a second major course of study. Upon successfully completing an additional major, the student is awarded a single degree. Notation of completed major courses of study are made on the student's official transcript. The student determines the primary major, but is counted as a full major in each program.

General Arts and Sciences Students

Students who exercise their option not to select a major program when first enrolling in the College are classified as general arts and sciences students. Such students should normally attempt to complete the general education requirement during the first two years and should normally apply for admission to a major program during the sophomore year. Applications for admission to a major program are available from the Registrar's Office.

The course requirements for each major are described fully elsewhere in this catalog. Major requirements are established by department faculty.

Curriculum Individualization

The degree programs outlined in the respective majors represent minimum requirements for all students who wish to receive a baccalaureate degree from William Paterson College. The College does, however, offer credit options to students who demonstrate unusual experiences, interests and abilities.

Undergraduate students may receive course credit, advanced placement or advanced standing. Criteria include school records, official documents and various examinations referred to below. Credit thus gained may be used to accelerate or enrich a student's program. Students who wish to complete a degree in a shorter period of time may pursue various acceleration options; students who wish to complete work or courses beyond those ordinarily prescribed in a major or for a degree may choose enrichment opportunities.

Credit by Examination Currently registered undergraduate students in good standing may receive credit for certain courses by successful performance in examinations offered by academic departments, in examinations of the College Level Examination Program (CLEP) or the College Proficiency Examination Program (CPEP). In some instances, a supplementary laboratory, practicum or performance examination may be required to satisfy major program requirements.

Students who think they have sufficient knowledge, acquired by experience or private study, are encouraged to accelerate or enrich the college program in this way. When credit by examination is awarded by the College, it is so entered on the students transcript. Failure in such examinations carries no penalty.

The credit by examination policy is subject to the following limitations:

- 1. No duplication of credit is permitted
- No examination is permitted in a subject in which students have pursued more advanced work for which they have received credit
- 3. No examination is permitted in courses in which failing grades have been previously assigned
- 4. The level of achievement required for award of credit is at least that which is normally specified and recommended by the American Council on Education and generally accepted practice
- Transfer students are entitled to advanced standing, subject to the above general limitations.

Such standardized and challenge examinations should not be undertaken lightly by the student, for acceptable standards and norms for satisfactory achievement are locally and nationally established, and the grades thereby achieved do become a part of the student's permanent record. Full-time students who attempt these testing options are still expected to maintain a minimum 12-credit load during any semester of residence; exceptions may be made for students in their final semester of degree completion.

Since College policy requires that a student complete the last 30 credits at WPC, a student may be awarded a maximum of 90 credits toward the baccalaureate degree through CLEP, CPEP, challenge examinations and other credits awarded for advanced standing. Students who avail themselves of this maximum advanced standing credit are, nevertheless, expected to fulfill all major program prescriptions even though they may exceed the minimum 120 credits for the baccalaureate degree. The various testing options are more fully discussed below.

CLEP The College-Level Examination Program is a nationally recognized series of general and subject examinations which tests primarily the content and theory of undergraduate courses normally offered during freshman and sophomore years. They are prepared, updated and processed by the Educational Testing Service.

The general examinations consist of tests in the five following areas: English, humanities, mathematics, natural sciences and social studies/history. Successful completion of a full battery of general examinations entitles a student to 30 credits, prorated for the student who attempts or succeeds in any of the separate examinations. The College recognizes and grants credit for a satisfactory performance above the 25th percentile.

Subject examinations are available and are generally equivalent to freshman-sophomore electives or introductory courses in major program sequences. Some subject examinations are equivalent to single semester, 3-credit courses; others to two-semester, 6-credit sequences. The College recognizes and grants credit for a satisfactory performance in these examinations for a minimum standard score of 45.

Credit for Writing Effective Prose, ENG 110, is granted only upon successful completion of the subject examination, **College Composition with Essay**.

Credit is awarded to students after the initial test or the first retest only. Since CLEP tests are primarily geared to freshman-sophomore levels, a student may be granted a maximum of 60 credits through these tests whenever earned.

Any currently enrolled student who has completed 60 credits or more is ineligible to take the CLEP general examinations.

When applicable to the student's major program, such examinations in CLEP may be taken only with the prior permission of the major department and the appropriate dean and only prior to the completion of 90 credits. Such permission in writing must be received by the registrar prior to the student's application for CLEP subject examinations.

GENERAL INFORMATION

Prior to the completion of 90 credits, subject examinations may be taken for elective or general education credit. Special permission is not required.

CPEP The College Proficiency Examination Program was established by the New York State Education Department. Examinations in the program are sometimes similar to and, at other times, different from the CLEP series. The major New Jersey institution employing CPEP examinations is Thomas A. Edison College.

William Paterson College recognizes and accepts a grade of C or better on some examinations presently available in this series, subject to the following restrictions:

- 1. No duplication of credit for CPEP and CLEP tests is permitted
- Students who have completed content and theory examinations may be required also to take local laboratory or performance examinations under special arrangements and with an additional fee
- 3. Certain examinations may not be accepted in fulfillment of baccalaureate major programs and/or certification requirements. Students should consult major advisors about the acceptability and transferability of credit in their major sequence
- 4. Unlike CLEP tests, only results of the initial testing are recognized by William Paterson College. Students are cautioned that passing grades earned in these examinations are added to their permanent record.

Military Credit United States Armed Forces Institute (USAFI) course credit is counted as "military" credit. Correspondence courses taken through an accredited college count as academic credits. College correspondence courses, USAFI courses, or a combination of both, are limited to a total of 30 credits. Speech performance

courses taken by correspondence are not accepted for credit.

Credit for military service schools is granted in accordance with the recommendations published by the American Council of Education (ACE) in A Guide to the Evaluation of Educational Experiences in the Armed Services.

Since no military credit will be added to the record of a student in the degree completion program unless the work was completed prior to entry, any desired USAFI courses should be taken while still on station before enrolling at William Paterson College.

Credit for Veterans Following the recommendations of the American Council of Education (ACE), the College awards credit to qualified veterans for military and academic experiences. Each veteran who has served at least one complete year in service is awarded 3 credits for military service. In addition, veterans may apply for an evaluation of any courses they may have completed in special training schools, correspondence schools and academic courses completed under the auspices of the United States Armed Forces Institute. The College adheres strictly to the minimum recommendation for credit by ACE and USAFI.

Air Force ROTC William Paterson students can earn appointments as commissioned officers in the United States Air Force through an ROTC crosstown agreement with the New Jersey Institute of Technology (NJIT). Students with two or more years of college remaining, in either undergraduate or graduate programs, are eligible to apply. Credits for all aerospace study courses taught at NJIT are applicable as free elective credits toward graduation from William Paterson College. For information on the conditions, benefits and procedures of the program, contact the Office of the Registrar.

Special Programs

Pre-Medical Programs

Students interested in careers in medicine, osteopathy, podiatry, dentistry or veterinary medicine should see **Pre-Professional Programs** under the School of Science and Mathematics, ahead.

Pre-Law Preparation

Although there is no prescribed pre-law curriculum, students are generally advised to concentrate on a course of study to develop effective methods of study, communication and thought. The selection of a major may be based on the students individual interests and talents. Courses in advanced English composition, accounting, economics, mathematics, philosophy, science, social science and humanities are generally useful in developing the aptitude to think analytically and logically and are often recommended. The student is advised to plan an undergraduate course of study with the advice of an advisor and in consultation with the various law school catalogs available in the Office of Career Services. Applications for the Law School Aptitude Test (LSAT) may be obtained at the Academic Information Center in Raubinger Hall.

Educational Opportunity Fund Program

The Educational Opportunity Fund program (EOF) is a special admissions and support program for students who are educationally underprepared and financially disadvantaged. The program is designed to provide full financial support and a broad range of educational and counseling assistance for all eligible students.

The program offers students the opportunity to begin their college experience in a summer program organized to assist students to become familiar with the academic demands of higher education, to strengthen basic skills and to gain exposure to the campus and college life. The EOF program also assists students in their personal and social adjustment to college.

To be eligible, students must have been residents of New Jersey for the past year, have a gross family income which meets state criteria and demonstrate potential for academic success.

Continuing Education

In conjunction with each of the schools of the College, the Center for Continuing Education offers conferences, workshops and seminars each semester for professionals in business, education, government and health services. These offerings are developed in recognition of the fact that continued competence in one's profession requires constant updating. The latest methods, techniques, theories and ideas in various areas are explored in these programs by members of the William Paterson College faculty and national and local specialists.

To cause minimal disruption in professionals' busy-lives, many continuing education programs are scheduled on Saturdays. Generally, workshops and conferences are offered for upper-undergraduate or graduate credit or noncredit. The majority of participants come from outside the College, although William Paterson College students are encouraged to attend offerings which cover topics of special interest to them.

Continuing professional education, however, is only one of the continuing education activities, which involve the entire college community. Those who resume study after a time lapse, adults who seek additional training for career growth and people who desire intellectual stimulation for personal enrichment form a significant segment of the student population. Many attend on a part-time basis, days, evenings or Saturdays.

The Center for Continuing Education works with other administrative offices to provide support services for nontraditional students. The Center also administers CLEP, ACT and NLN exams and coordinates off-campus courses and the College's summer sessions. Further information is available from the Center for Continuing Education.

Summer Sessions

The College offers two separate day and evening sessions during the summer months. Presession is a four-week program offered in June. The regular summer session makes available to regularly enrolled and visiting students an extensive offering of courses. Information about both sessions is available upon request from the Center for Continuing Education.

Semester Abroad

Semester Abroad, a 15-credit program, is open to students above the level of freshman and involves directed study and individual research at selected institutions in Denmark, Great Britain, Israel, Australia, Greece and Spain. To qualify as an applicant, a student must have a minimum 2.5 GPA on a 4.0 scale and must be approved by a review committee selected from the college staff. Students who wish to use this experience in any way related to their major programs must also receive authorization from their major department. Additional information is available from the Office of Student Program Development.

Honors Programs

Biopsychology The honors program in biopsychology draws on discoveries in such fields as behavior genetics, neuroanatomy, brain chemistry, neurophysiology, psychopharmacology and many others to unravel the biology of the mind and behavior. The National Science Foundation awarded two grants to support the development of this program. As with all honors programs at WPC, biopsychology is not a major, but a distinctive cluster of courses which adds breadth to, and reinforces, students' chosen majors.

Open to majors in psychology, biology, chemistry, sociology and nursing, this program is highly recommended for students planning graduate study—including premedical/dental/veterinary/graduate nursing students and, in general, those students interested in clinical or research careers. As an honors program, biopsychology is designed for highly motivated individuals seeking opportunities both to learn and to demonstrate excellence.

Interested students begin with a set of foundation courses carefully selected to provide a firm basis for the study of more advanced disciplines. Foundation courses begin in the freshman year. Students begin taking the core biopsychology courses in the junior year. The curriculum is enriched with seminars, discussion groups, research opportunities and speaker series. Students and faculty participate together in a closely knit academic community.

Humanities The humanities honors program provides a humanistic focus on a student's course of studies. Drawing upon literature, art, philosophy, history and religion, the program examines a wide variety of human ideals, goals and values from the classical to the modern era.

Students majoring in the humanities, the social or physical sciences, business or the professions can benefit from the perspective afforded by the humanistic disciplines.

Courses are team taught by faculty members of the humanities' departments who discuss the evolving patterns of human self-awareness in the great writers of the classical, medieval, early modern and contemporary worlds. The program makes ample use of guest speakers, films and special events to enhance regular classes. Students also have the opportunity to work independently on private projects.

International Management Students of exceptional ability and interest become eligible for the international management honors program during the first semester of the sophomore year. The program combines both regular and special honors section courses in economics, business administration, political science and accounting with foreign language and area studies such as history, geography and anthropology in Latin American, Far Eastern or European affairs. Students graduate with a bachelor's degree in their major, with honors in international management.

There are eight model curricula for students majoring in either business administration, economics, accounting, political science, history, geography, sociology or foreign languages. This program has been made possible, in part, by a grant under the Foreign Language and Area Studies title of the National Defense Education Act and was selected by the Council on Learning as one of 50 exemplary programs of international education in the United States. GENERAL INFORMATION

Graduate Programs

The College offers 13 graduate programs leading to the master of arts, master of science, master of education and master of business administration degrees.

Detailed information about programs, course offerings and admission requirements may be obtained by contacting the Admissions Office.

Academic Honors

Dean's List A student carrying a minimum of 12 credits who earns a grade point average of 3.45 or better is named to the dean's list.

Courses taken under the pass/fail option are not counted toward the 12-credit requirement.

Graduation Honors Students who have completed at least 60 credits at William Paterson College and who graduate with a final grade point average of 3.45 or better for all undergraduate courses are recognized as honor students with the following designations:

Average of 3.45-3.64 = cum laude Average of 3.65-3.84 = magna cum laude Average of 3.85-4.00 = summa cum laude

School of the Arts and Communication

School of the Arts and Communication

Jay Ludwig, Dean

Office: Ben Shahn Center for the Visual Arts 107

The School of the Arts and Communication offers degree programs in art, communication, dramatic arts, liberal studies and music for students interested in professional careers in these disciplines, including teaching, or in developing avocational interests.

The school also sponsors exhibits of the works of students and professional artists in the Ben Shahn Gallery; dramatic and musical presentations in Shea Center, Hunziker Theatre and Wayne Recital Hall; and television programs produced at the college studios—all of which are open to the college community and the public.

Students may participate in many musical groups, including the College Choir, Women's Choral Ensemble, Chamber Singers and College Chorus (all open to men and women students).

Performing instrumental groups include guitar, Latin, big band, avant garde and a number of small ensembles including jazz and brass.

Liberal Studies Major

Students interested in several disciplines offered by the School of the Arts and Communication, but who do not wish to major in any one of them, may pursue a liberal studies major. With the assistance of an academic advisor, students select a total of 48 credits from at least three of the school's majors, taking no more than 18 credits in any one of them. Successful completion of this program results in a bachelor's degree in liberal studies: School of the Arts and Communication.

Department of Art

Professors: H. Leighton, K. Lunde, J. Lynch, L. Paris, R. Reed Associate Professors: D. Haxton, A. Lazarus (chairperson), W. Muir, D. Raymond, M. Rothman, J. Ruban, G. Schubert, D. Shapiro, S. Smith, C. Magistro

Assistant Professors: A. Brown, M. Fay, M. Schnur

Instructors: L. Farber, D. Horton (half time), A. Lowe (half time)

Gallery Director: A. Einreinhofer

The Department of Art at William Paterson College is located in the 50,000 sq. ft. Ben Shahn Center for the Visual Arts. Situated in the same structure are the Ben Shahn Galleries, well known for excellence in exhibitions and lectures, and a vital component of the department and the College.

The department offers the bachelor of fine arts and bachelor of arts degrees in a wide variety of areas. Computer as an art medium, painting, printmaking, sculpture, photography, ceramics, textiles, graphic design, furniture design, art history and arts management are among the numerous concentrations. Certification for teaching is also offered.

The B.F.A. degree is oriented for those students whose objectives are inclined toward liberal arts training within a most rigorous professional studio arts program.

The B.A. and B.F.A. degrees are planned to enhance visual perception, cultivate independent thinking and prepare students for a variety of careers which require a keenly developed sensitivity in the visual arts.

Faculty members and guest lecturers are selected with great care. Each has a solid background professionally and educationally. The faculty is dedicated to the most rigorous standards of scholastic and artistic endeavor, yet realize that students work best within a pleasant, warm supportive atmosphere. Small classes provide the individual attention so necessary for each student to reach their utmost potential.

Fully equipped studios in all concentrations provide the resources necessary for the actualization of a wide range of 2- and 3-dimensional art areas. The department's computer graphics lab is equipped with the most up-to-date hardware and software. The animation component is recognized as a leader nationwide.

Close proximity to New York City enables our students to take advantage of its exciting number of galleries, museums, plays, dance performances and more. Tours of the city, visits to agencies and artists' studios and guest lecturers complement the programs of study.

The Department of Art conducts a mandatory sophomore and junior review of all B.F.A candidates. This review is held to assess the achievement level of a student's work and to aid an awareness of individual strengths and weaknesses. It is also an opportunity to discuss artistic and intellectual objectives as they relate to the student's chosen career. The objective of this review is to prepare candidates for their senior thesis review in each area of visual arts.

Regular student exhibitions are held in the Student Center galleries and the student gallery in Ben Shahn Center for the Visual Arts. Students are encouraged to participate in both college and public exhibitions. The department reserves the right to hold student works for the purpose of exhibitions for up to two years. Applicants for admission to the B.F.A. program must submit a portfolio of their work.

Portfolio size: approximately 24" x 30"

Include: sketch books, finished and unfinished drawings, paintings, watercolors, graphic designs, slides where appropriate. Select works that best represent you.

The first page should include a typewritten essay that discusses the applicant's educational objectives and why acceptance to the Art Department at William Paterson College will assist the applicant in attaining these objectives. Also include awards or citations received.

B.F.A. MAJOF Art History (REQUIREMENTS	99 CREDITS	
ART 114	Western Art I	15 credits	
ART 114 ART 115	Western Art II	3	
ART 210	Modern Art I	3	
ART 210	Modern Art II	2	
ART —	History elective	3 3 3	
Studio Foundations		15 credits	
ART 160	Graphic Delineation	3	
ART 161	Drawing		
ART 162	2-D Design	3 3 3 3	
ART 163	Color	3	
ART 164	3-D Design	3	
Art Electives	, , , , , , , , , , , , , , , , , , ,	12 credits	
(By adviseme	ent)		
Fine Arts Stu	dio	27 credits	
ART 141	Sculpture	3	
ART~181	Ceramics	3	
ART 241	Wood Materials I	3	
Any two of the above courses must be repeated at			
the advanced level outside the major 6			
Any four of the following:			
ART 121	Painting	3	
ART 133	Textile Design	3	
or			
ART 335	Weaving	3	
ART 151	Printmaking	3	
ART 171	Photography	3	
ART 191	The Computer as an Art Med	ium 3	
Concentration Studio Core 12 credits			
ART 201	Life Drawing	3	
ART 401	Advanced Drawing	3	
ART 413	Thesis Project I	3	
ART 414	Thesis Project II	3	
Remaining Concentration Major Core 18 credits			
(By adviseme	ent)		

MAJOR REQUIREMENTS: STUDIO

CONCENTRATION (B.A.)		39 CREDITS
Art History		9 credits
ART 114	Western Art I	3
ART 115	Western Art II	3
ART 210	Modern Art I	3
Studio Foundations		15 credits
ART 160	Graphic Delineation	3
ART 161	Drawing	3
ART 162	2-D Design	3
ART 163	Color	3
ART 164	3-D Design	3
Major Requirements		15 credits

Five studio courses by advisement

MAJOR REQUIREMENTS: ART HISTORY

CONCENTRATION (B.A.)		39 CREDITS
Core Courses		24 credits
ART 114	Western Art I	3
ART 115	Western Art II	3
ART 210	Modern Art I	3
ART 211	Modern Art II	3
ART 303	Greek and Roman Art	3
ART 393	Medieval Art	3
ART 395	Italian Renaissance Art	3
ART 396	Baroque and Rococo	3

Electives

Art history majors may elect any five upper-level art history courses with advisement

MINOR REG	QUIREMENTS: STUDIO ART	18 CREDITS
Choose four of the following courses:		
ART 121	Painting	3
ART 141	Sculpture	3
ART 161	Drawing	3
ART 163	Color	3
ART 201	Life Drawing	3
	Electives	6
MINOR REC	DUREMENTS ART HISTORY	18 CREDITS

MINOR REV	QUIREMENTS: ART HISTORI	10 CRED	113
ART 114	Western Art I		3
ART 115	Western Art II		3
ART 210	Modern Art I		3
	Art history electives		9
.			

Note: It is suggested that a student who wishes to minor in art history also elect 6 credits among the courses in the studio art minor.

SECONDARY EDUCATION (K-12)

CERTIFICATION REQUIREMENTS 27 CREDITS Please see chairperson in the Department of Curriculum and Instruction for appropriate certification sequence.

COURSES

All courses are for 3 credits, unless otherwise noted.

ART 114 Western Art I (lecture)

Art of the prehistoric period to 1400. A study of the development of painting, sculpture and architecture of the prehistoric. Egyptian, Mesopotamian, Aegean, Greek, early Christian, Byzantine, Romanesque and Gothic traditions.

ART 115 . Western Art II (lecture)

Art from 1400 to 1850. A study of the development of Western European painting, sculpture and architecture of the Renaissance, baroque, rococo, neoclassic and romantic periods.

ART 121 Painting (studio)

The principles of painting through a series of visual problems. The student gains an understanding of pictorial space through control of paint, drawing value and color. Introduction to a variety of technical processes and media. Outside assignments required.

Prerequisite: ART 160, 161, 162, 163 or 164

15 credits

ARTS AND COMMUNICATION

ART 130 Approaches to Western Art (lecture)

A survey course for nonart majors. Selected major periods in art history and specific major movements and artists. Introduces arts of painting, sculpture and architecture; develops visual sensitivity and makes the vocabulary of art history meaningful.

ART 133 Textile Design (studio)

The creation and application of design to textiles by various techniques, including block print, silk screen and batik. Outside assignments required.

Prerequisite: ART 160, 161, 162, 163 or 164

ART 140 History of Film (lecture)

Screening of important films in the history of this vital art form. Lectures and discussions lead to an understanding of film as a visual medium.

ART 141 Sculpture (studio)

An introductory course in sculpture using a variety of materials and techniques to create 3-dimensional forms. Outside assignments required.

ART 150 History of Design (lecture)

A detailed view of the evolution of design as an influencing factor in contemporary society. Traces the history of design from the industrial revolution to the present.

ART 151 Printmaking (studio)

Introduction to printmaking involving relief, intaglio and silkscreen techniques. Outside assignments required.

ART 160 Graphic Delineation (studio)

Basic course in graphic and instrument drawing techniques. Lettering and graphic presentation, free hand and instrument studies in orthographic, isometric and perspective projections. Outside assignments required.

ART 161 Drawing (studio)

Study of the fundamentals of drawing. Work with various media to develop a firm basis for the comprehensive and visual articulation of form. Outside assignments required.

ART 162 2-D Design

Studies in the ordering and structuring of 2-dimensional space. The student conceives and executes problems which involve the elements of art and their varied interrelations to develop aesthetic judgment and sensitivity. Outside assignments required.

ART 163 Color (studio)

Intensive study of the action and interaction of color through practice, as opposed to theory. A sequence of interrelated problems develops an awareness of the relativity of color, as well as a process of thought about color and, by extension, about art and its perception. Outside assignments required.

ART 164 3-D Design

Design as it applies to 3-dimensional forms. Skill in handling tools and various sculptural materials is stressed, as is the interrelationship with 2-dimensional design. Outside assignments required.

ART 170 Art in New York (lecture)

Explores New York City as the international center for the visual arts. Students tour major and less familiar museums and landmarks of architectural importance.

ART 171 Photography (studio)

Experiences in the use of the camera, basic developing of black and white film, printing, enlarging, toning and experimental photography. Experimental photography as a means of visual expression. Major emphasis on creativity and design. Outside assignments required.

ART 181 Ceramics (studio)

Physical properties of clay and methods of hand-construction and wheelthrowing. Complete processing through firing and glazing. Outside assignments required.

ART 191 The Computer as an Art Medium

The first-level course in computer graphics is used to generate computer art. Emphasis is placed on developing technical skills in the use of computer graphics software, with an orientation toward their application in the fine and applied arts.

ART 201 Life Drawing (studio)

A developmental approach: a series of drawing exercises with emphasis on the human figure and the plastic articulation of its construction in a variety of media. Outside assignments required.

Prerequisite: ART 161

ART 210 Modern Art I (lecture)

A study of the history of art from the French Revolution to 1910. Emphasizes the developments of major schools and styles, as well as significant individual contributions.

ART 211 Modern Art II (lecture)

A study of American and European painting, architecture and sculpture from 1910 to the present.

ART 221 Painting Experiments in Color

A sequence of related problems expands concepts introduced in the color course, further emphasizing the relativity of color and its organizations. Experimentation is combined with special emphasis on collage as an art form in itself and its relationships to aspects of painting, illustration, graphic design and photography. Prerequisites: ART 163 and 121

ART 231 Gallery Workshop I (studio)

The procedures and problems of mounting exhibitions and conventional and alternatives spaces with emphasis on details of preparation and installation. 4 credits

ART 232 Modern European Film (lecture)

A survey of the major European films from World War II to the present and their aesthetic, social and technical importance.

Prerequisite: ART 140

ART 233 History of Nonfiction Film (lecture)

The history of the so-called documentary cinema. Covers cinema from a political, historical, social, governmental, industrial and propaganda point of view. Includes the development of documentary film from its beginning in the early twentieth century to the present. Emphasizes nonfiction film from Western Europe, Russia, Great Britain and America.

Prerequisite: ART 140

ART 234 Art and Film (lecture)

The study of film as a nonnarrative medium. Emphasizes the history of the independent film. Recent films and video tapes by artists serve as a basis for production of film by the students in class.

ART 241 Wood Materials I

Introduction to a model-making shop. This course covers the fundamental process of hand tools and basic machines, concentrating on solid wood and its historical applications. Studio supplemented with selected readings, design problems and demonstrations.

ART 242 Wood Materials II

Continuation of Art 241. A study of various construction materials such as plywood, veneers and laminates and their applications to furniture design. Students concentrate on the machine process, finishes and design. Class work includes the fabrication of furniture pieces. Innovative use of materials is stressed. Studio supplemented with selected readings, papers, design problems and demonstrations.

ART 271 Advanced Photography (studio)

Students develop their own area of interest through consultation with the instructor. Course allows students to pursue various aspects of photography as a visual art form in depth. Outside assignments required. May be repeated once for credit.

Prerequisite: ART 171

ART 273 Color Photography (studio)

Experiences in basic techniques of developing color film, printing, enlarging, toning; also experimental photography as an art form. Outside assignments required. Prerequisite: ART 171

ART 300 History of Photography (lecture)

A study of photography, beginning with the camera obscura to the present day. Investigations of the aesthetic, social and technical ingredients contributing to its development. Contributions of important photographers and inventors from Europe and America are analyzed and discussed.

Prerequisites: ART 110 and 211 recommended

ART 302 Graphic Illustration (studio)

An in-depth study of the communicative aspects of illustration. Explores illustration as a tool to communicate objective information and to develop personal creative skills.

Prerequisite: ART 301

ART 303 Greek and Roman Art (lecture)

A study of the classical foundation of Western art, i.e., the architecture, sculpture and painting produced by the Aegean, Greek, Etruscan and Roman civilizations between 1500 B.C. and 300 A.D. Major themes include the interrelationships of art, religion and the state in the ancient world and the arts of Greece and Rome as the cultural heritage of the West.

Prerequisite: One course in art history

ART 311 Design Workshop I: Basics of Design

An introduction to design basics: symbology, typography, illustration and photography. Lectures include an introduction to design, art careers, care and use of professional art materials, introduction to basic lettering, design glossary and design research. Students are made aware of and acquire experience in the profession they are entering.

ART 312 Design Workshop II: Typography and Print Media

A continuation of ART 311 for students who wish to continue in the B.F.A. design program. This course encompasses various print media and covers the discipline and usage of typography.

ART 313 Print and Publication (studio)

Introduction to the design and publication of books, magazines, catalogs, etc. Examines theory, styles, trends and mechanics of cover and interior design, typographics, printing and the development of a personal creative approach.

Prerequisite: ART 311

ART 314 Art Direction for T.V. Commercials (studio)

Introduces the art student to the principles of art direction and production of television commercials and short information spots as they apply to advertising design. Prerequisite: ART 162

ART 320 Ideas in Contemporary Art (lecture)

Explores the numerous relationships between the visual arts and contemporary society in its broadest sense. A study of the visual arts as pragmatic phenomena in our culture.

ART 323 Watercolor (studio)

Explores all watercolor media and techniques. Emphasizes the development of imaginative design and an individual point of view. Outside assignments required. Prerequisite: ART 160, 161, 162, 163 or 164

ART 325 Advanced Painting (studio)

Principles of painting with increased emphasis on the student's selection of problems and media. Outside assignments required. May be repeated once for credit. Prerequisite: ART 321

ART 331 Advanced Gallery Workshop (studio)

The procedures and problems of curating exhibitions, writing catalogs. Visits to artists' studios and various galleries. May be repeated once for credit. Prerequisite: ART 231

ART 335 Weaving (studio)

Fundamentals and techniques of weaving, including warping and dressing the loom and sample weaving. Experimental approaches to design, color and texture in fabric construction. Outside assignments required. Prerequisite: ART 160, 161, 162, 163 or 164

ART 336 Advanced Weaving Textiles (studio)

Advanced techniques in weaving and pattern drafting and related problems in design. Further experience in sample warps in yardage weaving. Outside assignments required. May be repeated once for credit. Prerequisite: ART 335

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ARTS AND COMMUNICATION

ART 338 Modern Architecture (lecture)

A comprehensive survey of the major architectural monuments from the end of the eighteenth century to the present; the architects and the philosophies that motivated them.

ART 363 Furniture Design (studio)

The investigation of beginning wood studio techniques involving basic joinery and fabrication of furniture. Concepts of planning and execution of the student's individual point of view.

ART 392 Ancient Art (lecture)

The early appearance of graphic and figurative pictorial language in Paleolithic sites in France and Spain (ca. 25,000–13,000 B.C.), such as Lascaux and Altamira and Neolithic architecture, sculpture, painting and pottery (ca. 3,000–500 B.C.) in Malta, England, Ireland, Germany and Scandinavia are studied. Ancient Egyptian art 3,500–300 B.C. is analyzed in the second half of the semester. The universality of early forms of art and their relation to the concerns of hunting and agricultural peoples and the complex funerary art of dynastic Egypt are discussed. Prerequisite: One course in art history

ART 393 Medieval Art (lecture)

A study of the history of art from the conversion of Constantine in the fourth century A.D. to the first stages of Renaissance style in Europe. Emphasis is placed on the religious character of the Middle Ages, with special reference to Christian dogma and themes.

Prerequisite: One course in art history

ART 394 Northern Renaissance Art (lecture)

An examination of painting, sculpture and graphic media in Germany, the Netherlands, France and Spain, from approximately 1325 to 1550. Topics include the development of narrative, printing and graphic processes; vernacular uses of traditional symbolism and themes; the persistence of medieval patterns of thought and vision and the social content of northern Renaissance art, with particular reference to the Protestant Reformation.

Prerequisite: One course in art history

ART 395 Italian Renaissance Art (lecture)

A study of a period of great rebirth in the visual arts in Italy from 1300 to 1600 and its significance to our cultural heritage.

Prerequisite: One course in art history

ART 396 Baroque and Rococo (lecture)

A study of painting, sculpture and architecture in Western Europe from 1600 to 1800. The baroque and rococo styles are studied in relation to their cultural backgrounds with particular emphasis on the individual styles of their masters.

Prerequisite: One course in art history

ART 398 Art of India, China and Japan (lecture) Survey of the arts of India, China and Japan presented in their historical and cultural context. Prerequisite: One course in art history

ART 401 Drawing Studio: Special Problems in Drawing

Problems of the student's own choice in various media to develop fluency in drawing. Outside assignments required. May be repeated once for credit. Prerequisite: ART 161

ART 411 Design Workshop III: Advanced Print Media

Reviews all the subjects covered in the preceeding workshops and brings together the students' written, visual and philosophic skills in preparation for entry into the design field. Students select projects to be undertaken in order to concentrate on a particular design discipline or to acquire more practice in selected areas. The course also covers portfolio building and career guidance.

ART 412 Design Workshop IV: Package and Display A continuation of the B.F.A. design program, this course entails a study of the design and marketing skills needed to enter the field of package and display design.

ART 413 Thesis Project I (studio)

Senior-level course. In-depth investigation of the theoretical aspects of the design process within the context of designing effective visual communications. A complete portfolio representation required for a successful completion of Thesis Project I and Thesis Project II. Prerequisite: ART 412

ART 414 Thesis Project II (studio)

Senior-level course. Continuation of ART 413. Critical analysis of student portfolio with emphasis on personal assessments of philosophies and goals. Prerequisite: ART 413

ART 415 Introduction to Art Therapy (studio)

A survey of the basic conceptual foundations of art therapy. Emphasis on the major theories of various practitioners, such as Naumburg and Kramer, and discussion of various schools including present-day developments such as Gestalt art therapy. The distinctions between diagnostic and therapeutic applications of art therapy are drawn. Prerequisite: ART 160, 161, 162, 163 or 164

ART 422 Thesis Painting I (studio)

Senior-level course. An in-depth personal investigation of various media and theoretical aspects of painting. A complete portfolio presentation required for successful completion of Thesis Painting I and II. Prerequisite: ART 421

ART 423 Thesis Painting II (studio)

Senior-level course. Continuation of ART 422. Critical analysis of student's painting portfolio with personal assessments of philosophies and goals. Prerequisite: ART 422

ART 429 Thesis Weaving I (studio)

Senior-level course. Advanced techniques in weaving. Technique previously introduced may be elected for personal development. A complete presentation of the student's textiles and weaving portfolio required for completion of Thesis Weaving I and II. Prerequisite: ART 336

ART 430 Thesis Weaving II (studio)

Senior-level course. Continuation of ART 429. Critical analysis of student's weaving portfolio with emphasis on personal assessments of philosophies and goals. Prerequisite: ART 429 ART 434 Handweaving and Tapestry (studio)

Introduction to off-loom weaving including tapestry and pile weave techniques. Fundamentals of basketry involving coiling, twining and plating. Outside assignments reauired.

Prerequisite: ART 162

ART 441 Advanced Sculpture (studio)

Exploratory course in 3-dimensional materials and techniques including welding, casting, plastics and other fabrication techniques. Outside assignments required. May be repeated once for credit. Prerequisite: ART 341

ART 442 Thesis Sculpture I (studio)

Senior-level course. Problems of student's own choice. Possible combination of various media and techniques. A complete portfolio presentation required for successful completion of Thesis Sculpture I and II. Prerequisite: ART 441

ART 443 Thesis Sculpture II (studio)

Senior-level course. Continuation of ART 442. Critical analysis of student's portfolio with emphasis on personal assessment of philosophies and goals. Prerequisite: ART 442

ART 451 Advanced Printmaking (studio)

Continued development of student's selected techniques. Advanced intaglio, lithography, relief, silk screen and experimental techniques. Emphasis on color printing as well as black and white. Other options available, depending on background and interest. Outside assignments required. May be repeated once for credit.

Prerequisite: ART 351

ART 452 Thesis Printmaking I (studio)

Senior-level course. An in-depth investigation of theoretical and creative aspects of printmaking as a visual art. A complete portfolio presentation required for successful completion of Thesis Printmaking I and II. Prerequisite: ART 451

ART 453 Thesis Printmaking II (studio)

Senior-level course. Continuation of ART 452. Critical analysis of student's portfolio with emphasis on personal assessment of philosophies and goals. Prerequisite: ART 452

ART 461 Advanced Ceramics (studio)

Studies in the creative possibilities of clay as a plastic medium. Emphasis on the development of the individual craftsman. Outside assignments required. May be repeated once for credit.

Prerequisite: ART 361

ART 462 Thesis Ceramics I (studio)

Senior-level course. Advanced work in the development of the student's aesthetic and technical skills with experimental projects in glazes, throwing and building techniques. A complete portfolio presentation required for successful completion of Thesis Ceramics I and II. Prerequisite: ART 461

ART 463 Thesis Ceramics II (studio)

Senior-level course. Continuation of ART 462. Critical analysis of student's portfolio with emphasis on personal assessment of philosophies and goals.

Prerequisite: ART 462

A study of the technology of varied materials and the application of those materials to experimental utilitarian design. Creative use of materials and design forms stressed. Outside assignments required. May be repeated once for credit.

Prerequisite: ART 363

ART 480 Studio Seminar (studio)

Covers selected topics in the areas of art history, art criticism, art technology and art theory as they pertain to a professional career in studio art.

ART 481 Computer Animation I

An introduction to computer animation, the course covers the fundamental principles, concepts and processes used to create computer animated sequences. Skills and knowledge gained in Computer as an Art Medium IV are applied to the animation processes. Students concentrate on the use of midlevel computer animation software systems running on PC based hardware. Class work includes the production of several short computer animated pieces that are output to video tape.

Islamic Art and Architecture (lecture) ART 490

An in-depth study of painting, decorative arts and architecture within their cultural contexts in countries whose art forms were influenced by the Islam religion. Emphasis on Iran, but other countries include Egypt, Spain, Turkey, Iraq, Syria and India, from the founding of Islam in the seventh century through the seventeenth century. Prerequisite: 3 credits in art history

ART 491 Neoclassic and Romantic Art

A study of neoclassic and romantic painting, sculpture and architecture from 1750 to 1850, concentrating on France, Germany, Italy, Scandinavia and England. Movements and counter movements, innovation and nostalgia for the past, reforms, overthrow and revival; the concept of romanticism and neoclassicism are shown to be shifting and constantly changing.

Prerequisite: 3 credits in art history

The History of Book Design ART 493

A study of the art of the book from fifth-century manuscript illumination to early twentieth-century book illustration. Special emphasis is placed on the relationship of patrons such as Charlemagne to their manuscripts, on some outstanding cycles of manuscript illustrations such as the Apocalypse and the Bestiary and on the contribution of William Morris and the Kelmscott Press.

ART 494 Byzantine Art (lecture)

A study of architecture, painting and sculpture in the Eastern Mediterranean, the Balkans and Italy from 315 to 1453 A.D. Byzantine art is interpreted as one of the preserves of the Greco-Roman heritage, an expression of a Christian imperial state and a model for Western European art during the middle ages.

Prerequisite: One course in art history

ART 499 Independent Study

As approved and to be arranged. 1-3 credits

Department of Communication

Professor: A. Maltese

Associate Professors: S. Berman, J. Chamberlain, A. Freund, A. Lenrow, D. Peck (chairperson) Assistant Professors: D. Evans, K. Hofacker, H. Jackson, L. Katz, C. McMickle, B. Morganstern, I. Olaye, P. Travis

The Department of Communication offers a B.A. in communication with concentrations in interpersonal communication, radio and television broadcasting, film, journalism and telecommunications.

The interpersonal communication concentration provides courses in the theory and practice of verbal and extraverbal communication in contexts including one-toone, group, organization and public communication. The purpose is to prepare the student for a variety of career options involving personal skill and knowledge in communication arts.

The radio and television broadcasting concentration prepares the student for a career in the production, performance and criticism of communication through radio and television media. Students take courses in theory and practice of the mass communication arts to develop understanding and skill in media-based communication.

The film concentration offers courses in theory, production and analysis of film in its various genres and potential uses to acquaint students with the theory, practice and aesthetics of film as a communication art.

The journalism concentration offers courses in both print and broadcast media, designed with a two-fold purpose: (1) to prepare students for careers in the field and (2) to make students more sophisticated readers-listenersviewers of the news media. While emphasis is placed on writing, students learn all phases of the news-gathering and reporting process.

A telecommunications concentration is being developed to provide students opportunities to investigate areas in voice, video and data transmission, including videotext, information systems and teleconferencing. The planned sequence introduces students to technologies such as satellite and phone systems, as well as to business communication skills. The program prepares students for opportunities in the growing telecommunications industry, while examining the impact of telecommunications on human communication.

A variety of professional opportunities is open to communication majors. These include careers in journalism, including newspapers, magazines, radio news and television news; radio and television production, including announcing and station management; films, including filmmaking, editing and criticism; and a variety of business, government, public and educational occupations such as public relations, personnel work, sales and supervision training, etc.

The major also provides an excellent undergraduate background for students intending to pursue advanced degrees in law, business and areas of public service, government or education.

MAJOR REQU	UIREMENTS 39 CREDIT	s
COMM 110	Communication in Action	3
COMM 120	Mass Communication	3
COMM 444	Colloquium in Communication	3
	-	5
	the following:	2
COMM 220	Radio and Television	3
COMM 222	The Press in a Free Society	3
COMM 234	Film as a Medium	3
COMM 250	Journalism	3
COMM 260	Oral Interpretation	3
COMM 266	Dynamics of Communication	3
Major Electiv	ves 21 credi	ts
Choose 21 cr	edits from any of the following areas:	
A. Interperso	onal	
COMM 221	Introduction to Communication Theory	
COMM 265	Foundations of Language	
COMM 340	Intercultural Communication	
COMM 361	Successful Business and Professional	
	Communication	
COMM 363	Public Speaking	
COMM 364	Voice and Speech Production	
COMM 365	Introduction to Rhetoric	
COMM 463	Group Discussion	
COMM 464	Debate	
B. Radio and		
COMM 225	Audio Production	
COMM 321	Announcing	
COMM 322	Advanced Announcing and Narration	
COMM 323	Television Production	
COMM 324	Writing for Television	
COMM 326	Advanced Television Production	
COMM 320	Television Internship	
COMM 352	Broadcast Advertising	
	Advanced Audio Production	
COMM 353		
COMM 421	Broadcast Management	
COMM 423	International Broadcasting Systems	
COMM 424	Radio Production Workshop	
COMM 425	Television Workshop	
COMM 426	EFP and Video Editing	
C. Journalisn		
COMM 348	Public Relations	
COMM 349	Radio News	
COMM 350	Television News	
COMM 351	Advanced Reporting	
COMM 451	Freelance Writing	
COMM 452	Advanced Broadcast Journalism	
COMM 454	News Editing	
COMM 455	Electronic News Gathering	
COMM 459	Journalism Field Studies	
COMM 460	Reporting Public Affairs	
D. Film Studies		
COMM 230	Filmmaking I	
COMM 331	Filmmaking II	
COMM 332	Documentary Film Production	
COMM 333	Film Animation I	
COMM 334	Film Animation II	
COMM 431	Screenwriting	
COMM 432	Dramatic Film Production	

COMM 434 Current Cinema

COMM 437 Film Editing

COMM 499 Independent Study

E. Related Courses

With permission of the advisor, the department will accept a limited numbr of related courses from other disciplines. Among these are:

initia incore unco		
MUS 251	Audio Recording I	
MUS 252	Audio Recording II	
THEA 130	Scenery Construction for	
	Stage and Media I	
THEA 230	Scenery Construction for	
	Stage and Media II	
THEA 236	Lighting for Stage and Media I	
THEA 239	Scene Design for Stage and Media I	
THEA 274	Acting for Television I	
THEA 335	Scene Painting I	
THEA 336	Lighting for Stage and Media II	
THEA 339	Scene Design for Stage and Media II	
THEA 374	Acting for Television II	
THEA 377	Directing for Stage and Media	
THEA 435	Scene Painting II	
THEA 474	Acting for T.V. Commercials	

COURSES

Unless otherwise noted, all courses are for 3 credits.

COMM 110 Communication in Action

A study of oral communication as an interpersonal and dynamic process. Students engage in communication experiences designed to develop understanding of and skill in interpersonal communication.

COMM 120 Mass Communication

The institutions, history and technology of the mass media are examined as communication systems. Newspapers, magazines, film and broadcasting media are studied in terms of social and personal impact. Contemporary media issues, policies and ethics are discussed.

COMM 220 Radio and Television

An introductory course tracing the historical development and implications of the media. The student is introduced to programming materials, criticisms, standards, skills and production methods.

Prerequisite: COMM 120

COMM 221 Introduction to Communication Theory Acquaints the student with contemporary theory and research in the field of communication. Motivation, interaction and effects of communication are examined in a range of contexts, including between persons, small and large groups, organizations, cultures and mass communication systems.

Prerequisite: COMM 110

COMM 222 The Press in a Free Society

A study of the relationship between the news media and society in the United States, with emphasis on the issues and principles that unite and divide the two. Press criticism is an important part of content.

Prerequisite: COMM 120

COMM 225 Audio Production

Examines the audio aesthetics of sound production. Analyzes the creative responsibilities involved in the elements of sound production. Students are trained in the use of studio and remote audio equipment and are given practice in writing, producing, directing and performing in audio productions.

COMM 230 Filmmaking I

A study of filmmaking techniques from the writing of the script to the final product. Technical and theoretical aspects of filmmaking are covered in a workshop where students learn through actual production. Work includes writing, directing, cinematography, sound and editing. Aesthetics and evaluation of films are introduced through the viewing and discussion of certain classic examples. Prerequisite: COMM 234

COMM 234 Film as a Medium

The study of film as a unique audiovisual form of communication: the effect of film as an aesthetic medium in mass communication, the creative process of filmmaking and its technical methods. Surveys the use of film in different media: documentary films for television, investigative films, film and the arts, animation, experimental films, electronic films, teaching films, training films, science films, commercials and industrials, promotional films, television series and theatrical features. Prerequisite: COMM 120

COMM 250 Journalism

Practical experience in gathering news and writing the basic journalistic forms, including the straight news story and various types of features. Students undertake reporting assignments designed to develop skills in interviewing, observation and writing and receive individual evaluation of their work.

Prerequisites: COMM 120 and ENG 110

COMM 260 Oral Interpretation

Students learn to communicate the content, form and mood of works of literature through the medium of oral reading. Includes expository, narrative and dramatic prose and narrative, dramatic and lyric poetry.

Prerequisite: COMM 110 or permission of the instructor

COMM 265 Foundations of Language

Presents an overview of the nature and function of language as a communication tool. Stresses the aspects of language relating to the phonologic, semantic and linguistic structures.

COMM 266 Dynamics of Communication

A study of the meaning of verbal and nonverbal languages and the influence of these languages as tools for communication.

Prerequisite: COMM 110

COMM 321 Announcing

Introduction to the responsibilities and skills required of the individual performer in the preparation, announcing and narration of the various types of nondramatic material for television, radio and film.

Prerequisite: COMM 260

ARTS AND COMMUNICATION

COMM 322 Advanced Announcing

An in-depth treatment of the field. Heavy emphasis on narration for television and film. Extended work in the production of news and disc jockey programs, using broadcast-level facilities.

Prerequisites: COMM 321 and 364

COMM 323 Television Production

Practice in writing, producing, directing, performing and crewing television productions and videotape materials. Provides the opportunity to study and practice broadcast program creation under laboratory circumstances which simulate the conditions of on-the-air television broadcasting.

Prerequisite: COMM 225

COMM 324 Writing for Radio and Television

The technique of writing dramatic and nondramatic material for radio and television. Theory, practice and analysis of broadcast material, advertising and continuity are emphasized. Designed to develop skill in expository, narrative and persuasive writing as it relates to broadcasting. Prerequisite: ENG 110

COMM 326 Advanced Television Production

Provides an opportunity to work within standard operating procedures similar to those utilized by commercial and educational television. Includes practice and projects in such critical areas as timing, electronic editing, minor equipment maintenance and color programming. Prerequisite: COMM 323

COMM 330 Television Internship

Students are assigned to an off-campus facility for practical hands-on experience. Professional situations in broadcast and nonbroadcast organizations are utilized. Prerequisite: Permission of the instructor

COMM 331 Filmmaking II

The theory and technique of motion picture production with lip-sync-sound in Super 8 and 16mm film. Different approaches in scriptwriting, directing nonactors, types of lighting techniques, lighting exercises, cinematography, lenses and perspective, composition, academic editing, editing in camera, editing on the bench. Practical training in budgeting and shooting with Super 8 and 16mm film with double system syncsound. Prerequisite: COMM 230

COMM 332 Filmmaking III

An intensive lecture/laboratory course in film production that concentrates on professional techniques of casting, rehearsing, lighting, editing. Each student completes a short 16mm narrative or documentary film. Prerequisite: COMM 331

COMM 333 Film Animation I

An introductory study of the history, theory and technique of animated film production. Emphasis is on the process of the production, rather than on a final product.

COMM 334 Film Animation II

An advanced study of the techniques of animated film production. Each student completes an animated film. Prerequisite: COMM 333

COMM 340 Intercultural Communication

Through a comparison of numerous cultures, students explore the primary distinguishing characteristics of culture and identify strategies for relating their own culture to those of others. Emphasis is placed on an eclectic cultural design. The primary course goal is to provide students practical and theoretical knowledge and an understanding of intercultural communication in contemporary life situations (business, social, personal, political, musical, religious, educational, philosophical, artistic and literary contexts).

Prerequisite: COMM 110

COMM 348 Public Relations

Defines the functions of public relations and distinguishes it from regular journalism. While exploring the appropriate functions and outlets for public relations activity, the course also investigates the ethics of the function and develops an understanding of the basic tools used in handling public relations for various types of situations. Prerequisite: COMM 250

COMM 349 Radio News

Instruction and practical experience in the basic techniques of radio journalism, including news writing, reporting, producing newscasts and writing copy for taped segments of the newscast. Analysis of radio news broadcasts and discussion of the major issues involved in radio journalism.

Prerequisite: COMM 250

COMM 350 Television News

Instruction and practical experience in the basic techniques of television news writing. Writing for film and videotape, reporting for television and producing television news programs. Analysis of television news broadcasts and discussion of the major issues involved in television journalism.

Prerequisites: COMM 250 and 323

COMM 351 Advanced Reporting

Guides students in developing in-depth news and feature articles. Evaluation of individual's work. Matters of current concern to the news media are discussed. Prerequisite: COMM 250

COMM 352 Broadcast Advertising

Introduces the student to the development and philosophy of broadcast advertising. Theory and practice of commercial advertising techniques are covered. Emphasizes the nature of the creative process and the relationship existing among client, broadcaster and the government.

Prerequisites: ENG 110 and COMM 220

COMM 353 Advanced Audio Production

Students increase their ability to write, produce, direct and perform in audio production projects. Introduction to various formats, creation of sound effects, musical background and direction are emphasized.

Prerequisite: COMM 225

COMM 361 Successful Business and Professional Communication

Through the study of communication theory as it relates to business and the professions and through practice simulations, the student acquires a knowledge of those communicative and motivational skills essential for success in business and professional life.

COMM 363 Public Speaking

Students learn the theory and skills of preparing and presenting public speeches. Emphasis is on practice and criticism of classroom speaking experiences. Prerequisite: COMM 110

COMM 364 Voice and Speech Production

A study of the speech mechanism and its relationship to the development and mastery of basic breathing, vocal and articulation skills. Students in communication, education, business, theatre, radio, singing and allied fields are encouraged to master these skills. Special attention given to individual voice, articulation and communication problems. Conference and practice hours to be arranged.

COMM 365 Introduction to Rhetoric

An examination of the development of persuasion. Emphasizes classical and contemporary theories of rhetoric which are related to contemporary standards and practice in current public address.

Prerequisite: COMM 221

COMM 421 Broadcast Management

An appraisal of management problems in commercial broadcasting for the advanced student. Includes sales and profit, personnel, programming, audience, governmental regulations and technical factors.

Prerequisite: COMM 220

COMM 423 International Broadcasting Systems

A comparative study of the national and international broadcasting systems of the world. Regional broadcasting systems and the structure and operations of present communication satellite systems.

Prerequisite: COMM 220

COMM 424 Radio Production Workshop

An advanced course in audio production designed to augment the student's skills and techniques in radio production. Direction and production of various commercial and noncommercial spots, news documentary, discussion and music formats are produced for airing on campus radio and commercial and noncommercial public radio stations.

Prerequisite: COMM 353

COMM 425 Television Workshop

Students produce, write and direct video projects dealing with instructional material, news and public affairs and entertainment programming. Projects must be programmable for campus use, cable television, public broadcasting and other open circuit channels. Prerequisite: COMM 326

COMM 426 EFP and Video Editing

An advanced course in electronic field production and video editing. In field situations, students create, produce, videotape and edit video documentaries, public service announcements and instructional projects for cable and campus use. Extensive use of portable video cameras and 3/4" editing systems is required.

Prerequisite: COMM 326 or permission of the instructor

COMM 431 Screenwriting

Provides opportunities for original student work or adaptations in screenwriting. Concerned with choice of subject, story, treatment and production requirements. News specials and documentary styles are covered. Interviews, continuity and commercial copywriting are handled with emphasis on storyboard techniques. Viewing and analysis of professional scripts are included. Prerequisite: ENG 110

COMM 432 Dramatic Film Production

Includes writing the storyline from an original subject or adaption, film treatment, shooting, script, casting, selection of crew and equipment, function of the dialogue director, improvisation cinema, verite style, the function of the art director, lighting, film directing, film acting and editing a dramatic film.

Prerequisite: COMM 331

COMM 434 Current Cinema

Introduces the aesthetic and technical appreciation of contemporary motion pictures. Concentrates on content, production development, stylistic analysis and the development of critical analysis as applied to current films. Prerequisite: COMM 234

COMM 437 Film Editing

The study of the art and technique of editing a sound film in Super 8 and 16mm. Focuses on the continuity of a story on film, cinematic time, the visual rhythm within a sequence, visual and audio relationships, film structure, montage. The technique of editing from the screening of the dailies to the first composite answer print of the finished product.

Prerequisite: COMM 332

COMM 444 Colloquium in Communication

An opportunity for advanced study and discussion of issues and questions, together with the opportunity to study and analyze the research available in various areas of communication. Each student chooses an area of communication in which to plan and carry out a research project. For senior communication majors only

COMM 451 Freelance Writing (Nonfiction)

Instruction and supervised practice in nonfiction writing for today's periodical. Students learn how to analyze market needs, develop ideas suitable for publication, prepare manuscripts and market what's been written. Prerequisite: COMM 250

COMM 452 Advanced Broadcast Journalism

A course designed for graduating seniors, aimed at preparing them for work in broadcast news in either radio or television. The goal is to polish skills developed in previous journalism courses to a level at or approaching that required to obtain entry-level jobs in broadcast journalism.

Prerequisite: COMM 350

COMM 454 News Editing

Prepares students to function as copy editors in the news field. Supervised practice in editing news copy and writing headlines. Use of visual materials and layout of pages. Analysis of various U.S. newspapers. Prerequisite: COMM 250

ARTS AND COMMUNICATION

COMM 455 Electronic News Gathering

The investigation, preparation and production of news stories for broadcast. Emphasis on the independent preparation of copy, individual selection of story content and production and video/audio tape for journalistic enterprise. Students refine previously developed skills in writing and editing for broadcast. Individual and groupproduced news stories in the field receive feedback from instructor and peers. Programming materials are developed and produced for use on local outlets. Prerequisite: COMM 350

COMM 459 Journalism Field Studies

Practical application of what is learned in the classroom. Students work at news or public relations jobs on or off campus. By permission only, with preference given to ongoing work.

Prerequisite: Permission of the instructor

COMM 460 Reporting Public Affairs

The nature and law of public affairs on federal, state and local levels. The rights of working reporters and the public to matters of legitimate record are outlined, as are the practical steps necessary to gather this information. Prerequisite: COMM 250

Department of Music

Professors: H. Aitken, J. Anderson, R. DesRoches, R. Foley, D. Fornuto, N. Guptill, D. Heier, G. Kirkpatrick, J. Kresky, M. Krivin, W. Woodworth

Associate Professors: D. Garcia, S. Marcone (chairperson), M. O'Connor, R. Reid, J. Weidensaul

Assistant Professors: P. Finney, V. Hill

The Music Department offers programs leading to a bachelor of music (B.M.) in classical performance, jazz performance, music management and music education and a bachelor of art (B.A.) in musical studies. The B.M. in music education fulfills certification requirements for public school music teaching in New Jersey, grades K–12. These programs are structured to reflect the multifaceted demands on today's and tomorrow's musicians.

All degree programs contain the best of both musical worlds: the flexible, innovative ideas in contemporary music combined with the finest in the traditional. As a result, students pursue a program of study eminently suited to preparing them for a professional life in music.

Auditions

A performance audition is required of all applicants to the B.M. degree programs. The evaluation by the audition jury consists of performance and an evaluation of the applicant's ability in theory, keyboard and aural skills.

COMM 463 Group Discussion

Theory and practice in various types of discussion situations. Consideration of the place of discussion in our democratic society. Integration of traditional principles with recently developed concepts and approaches.

Prerequisite: COMM 110 or permission of the instructor

COMM 464 Debate

The application of the principles of argumentation by debating a selected topic in public and intercollegiate debate formats. Stresses both theory and performance in oral advocacy.

Prerequisite: COMM 363 or permission of the instructor

COMM 499 Independent Study

As approved and to be arranged through the student's department advisor.

1-3 credits

Entrance Requirements: B.M. Classical Performance B.M. Classical Performance/ Music Education B.M. Music Management/ Classical Performance Track

Piano An invention by Bach, a first movement of a sonata by Haydn, Mozart or Beethoven (except op. 27 no. 2 in C sharp minor), a work by a romantic or contemporary composer. At least one selection must be played from memory. Major and minor scales and arpeggios included.

Organ Student must have a piano background of Bach two-part inventions and early Mozart or Beethoven sonatas. It is desirable for the student to play a composition of Bach, a romantic work and a modern work.

Voice Demonstration of vocal potential. One art song in any language, memorized. A second song is strongly recommended.

Strings A sonata or concert piece of moderate difficulty. Major and minor scales and a chromatic scale covering the complete range.

Woodwinds A sonata movement or concert piece of moderate difficulty. Major and minor scales and a chromatic scale covering the complete range.

Brass A movement of a sonata or concerto of moderate difficulty. Major, minor and chromatic scales, articulated and slurred.

Percussion Demonstration of snare drum rudiments. A basic technical knowledge of the mallet instruments. Elementary exercises for timpani.

Guitar Segovia scales, major and minor, one étude by either Sor (Segovia ED), Carcassi or Aguado. Two concert pieces of the students own choice from either "pre"baroque (ex. De Visee, Sanz, Milan, etc.), baroque (Bach, Weiss, etc.) or romantic Spanish (Tarrega, ex. Adelita; Liobet, ex. "El Testament D'Arnelia").

Keyboards The applied area of keyboards is designed for the student who wants to be proficient on several keyboard instruments (piano, organ, synthesizer, harpsichord), rather than specialize in one. The student receives applied lessons on all of the above instruments.

The audition requirements for this applied major in the classical performance track are the requirements for piano in the B.M. music education emphasis and the B.M. music management program, with the addition of an optional cassette recording of original compositions on synthesizer.

Note: Students with previous college-level training may receive credit by examination and advanced placement in any music class. For example, most keyboard performance majors need not take four semesters of Functional Class Piano.

Entrance Requirements: B.M. Jazz Studies and Performance B.M. Music Management/ Jazz Performance Track

A preaudition tape is required; contact the Music Department for details.

Piano and Guitar Major, minor and chromatic scales, 4 octaves (guitar, 2 octaves). Dorian, Mixolydian, Lydian modes. Basic 6th and 7th chords: major and minor 6th and 7th; dom. 7th; min. 7th b5; min. with maj. 7th; half dim. 7th; dim. 7th; aug. 7th. Sight read lead sheets. Several jazz standards with improvisation (one slow-tempo ballad and one up-tune). Blues—several keys (various tempos).

Single Line Instruments Major, minor and chromatic scales. Dorian, Mixolydian, Lydian modes. Basic 6th and 7th chords (arpeggiated): major and minor 6th and 7th; dom. 7th; min. 7th b5; min. with maj. 7th; half dim. 7th; dim. 7th; aug. 7th. Sight read ensemble parts. Several jazz or pop standards with improvisation (one slow-tempo ballad and one up-tune). Blues—several keys (various tempos).

Vocal Several pop/jazz standards (one slow-tempo ballad and one up-tune). Sight reading. Ear training.

Drums Several jazz standards with improvisation. (Play through form, improvise chorus.) Play time—jazz waltz, bossa, swing, etc. Break in various meters. Sight read ensemble parts.

Keyboards The applied area of keyboards is designed for the student who wants to be proficient on several keyboard instruments (piano, organ, synthesizer, harpsichord), rather than specialize in one. The student receives applied lessons on all of the above instruments.

The audition requirements for this applied major in the jazz performance track are the requirements for planists in the B.M. jazz studies and performance program, with the addition of an original composition on synthesizer included on the cassette tape.

Ear Training (all applicants) Aural identification of intervals, triads and basic 7th chord types (M7, Min. 7, dom. 7th, min. 7th b5, min. with maj. 7th; half dim. 7th; dim. 7th; aug. 7th).

Major Programs

The B.A. degree is designed for students who desire a liberal education with emphasis on music while obtaining a diversified education in the liberal arts. The B.M. degree programs are classical performance, jazz studies and performance, music management and music education. The B.M. degree program in music education offers two concentrations: vocal and instrumental.

	MUSICAL STUDIES (B.A.)				
REQUIREME					
MUS 000	Recital Hour (8 semesters)	0			
MUS 160	Freshman Comprehensive				
	Musicianship I	3			
MUS 161	Freshman Comprehensive				
	Musicianship II	3			
MUS 164	Functional Class Piano I	1			
MUS 165	Functional Class Piano II	1			
MUS 180	Freshman Ear Training I	1			
MUS 181	Freshman Ear Training II	1			
MUS 207	Music History and Literature I	3			
MUS 208	Music History and Literature II				
MUS 244	Practical Musicianship	3 3			
	Performing Groups	4			
Music Depar	tment Elective Courses 12 c	redits			
Choose from	::				
MUS 220	Jazz History	3			
MUS 255	Jazz Harmony	3			
MUS 260	Sophomore Comprehensive				
	Musicianship I	3			
MUS 261	Sophomore Comprehensive				
	Musicianship II	3			
MUS 264	Functional Class Piano III	1			
MUS 265	Functional Class Piano IV	1			
MUS 280	Sophomore Ear Training I	1			
MUS 281	Sophomore Ear Training II	1			
MUS 301	Form and Analysis	3			
MUS 302	Arranging	3			
MUS 304	Studies in Music	3			
MUS 317	History of American Popular Music				
	Since 1950	3			
MUS 332	Music in the Late Renaissance and				
	Baroque Periods	3			
MUS 333	Music in the Rococo and Classical				
	Periods	3			
MUS 334	Music in the Romantic Period	3			
MUS 401	Twentieth-Century Music	3			

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ARTS AND O	OMMUNICATION				
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	PERFORMANCE (B.M.)		MUS 268	Functional Class Jazz Piano I	1
REQUIREM		CREDITS	MUS 269	Functional Class Jazz Piano II	1
MUS 000	Recital Hour (8 semesters)	0	MUS 305	Applied Music Minor*	1
MUS 160	Freshman Comprehensive	2	MUS 306	Applied Music Minor*	1
MUE 161	Musicianship I	3.	MUS 310	Junior Recital Performance I	0
MUS 161	Freshman Comprehensive		MUS 311	Junior Recital Performance II	0
MUS 180	Musicianship II Freshman Ear Training I	3 1	MUS 322	Jazz Improvisation III	2
MUS 180 MUS 181	Freshman Ear Training I	1	MUS 323 MUS 356	Jazz Improvisation IV Applied Music Major	2
MUS 207	Music History and Literature I	. 1	MUS 350 MUS 357	Applied Music Major Applied Music Major	3
MUS 208	Music History and Literature I	3	MUS 368	Functional Class Jazz Piano III	3 1
MUS 234	Sophomore Recital Performance	0	MUS 369	Functional Class Jazz Plano IV	1
MUS 260	Sophomore Comprehensive	0	MUS 413	The Music Business	3
	Musicianship I	3	MUS 456	Applied Music Major	3
MUS 261	Sophomore Comprehensive	Ū.	MUS 457	Applied Music Major	3
	Musicianship II	3	MUS 464	Senior Recital Performance	0
MUS 280	Sophomore Ear Training I	1	MUS 470	Jazz Arranging	3
MUS 281	Sophomore Ear Training II	1	MUS 471	Advanced Jazz Arranging	3
	Ensembles (8 semesters)	8	MUS 495	Jazz Styles and Analysis	3
	Applied Music Major (8 semesters	;)	Dercussioni	ists substitute 4 semesters of MUS 226 for	MUC
	MUS 190, 191, 290, 291, 390, 391, 4	90,			MUS
	491, (4 cr. each)	32		bstitute MUS 205, 206 for MUS 322, 323.	
MUS 310	Junior Recital Performance I	0	Vocalists su	bstitute MUS 305, 306 for MUS 137, 138.	
MUS 311	Junior Recital Performance II	0		red for pianists.	
MUS 380	Junior Ear Training I	1		ming groups are 1 credit each. Take two) per
MUS 381	Junior Ear Training II	1	semester.	1	
MUS 464	Senior Recital Performance (2			alists93 credits	
	semesters)	0		sts—91 credits	
	Functional Class Piano (4 semeste		Vocalists9		
	1 credit each) (only 2 semesters for		Pianists9		
	keyboard majors)	4	vocalists.	06, 205 and 206 not required for pianists	s and
	Other music courses	12–13		classical music required for pianists and	d vo
	IEC AND DEDEOD		calists.	classical music required for plantsis an	J V0-
	IES AND PERFOR- M.) REQUIREMENTS 91–93 (CREDITS			
MUS 137	Jazz Improvisation I	2	Recital Hou	ur (8 semesters; no credit)	
MUS 137 MUS 138	Jazz Improvisation II	2	MUSIC MA	NACEMENT (D M)	
MUS 156	Applied Music Major	3	REQUIREM	NAGEMENT (B.M.) IENTS 88 CRE	TITE
MUS 157	Applied Music Major	3	-		
MUS 160	Freshman Comprehensive	U		ust earn a 3.0 GPA in MUS 125, Survey of Entertainment Industry, and one addit	
	Musicianship I	3		gement course in order to be fully admitt	
MUS 161	Freshman Comprehensive	-		n. They then complete the sequence out	
	Musicianship II	3		5 GPA must be maintained in these cours	
MUS 164	Functional Class Piano I†	1		rough the sequence.	0310
MUS 165	Functional Class Piano II†	1			
MUS 180	Freshman Ear Training I	1	Core Cours		redits
MUS 181	Freshman Ear Training II	1	MUS 000 MUS 160	Recital Hour (8 semesters)	0
MUS 205	Applied Music Minor*	1	MUS 160	Freshman Comprehensive Musicianship I	2
MUS 206	Applied Music Minor*	1	MUS 161	Freshman Comprehensive	3
MUS 220	Jazz History	3	M00 101	Musicianship II	3
MUS 234	Sophomore Recital Western Art Music	0	MUS 162	Applied Music Major	2
MUS 236	Jazz Performance Groups	3	MUS 163	Applied Music Major	2
MUS 241	Sophomore Ear Training I	16 1	MUS 180	Freshman Ear Training I	1
MUS 242	Sophomore Ear Training I	1	MUS 181	Freshman Ear Training II	1
MUS 251	Audio Recording I	3	MUS 220	Jazz History	3
MUS 255	Jazz Harmony	3	or		
MUS 256	Applied Music Major	3	MUS 317	History of American Popular Music	3
MUS 257	Applied Music Major	3	MUS 234	Sophomore Recital Performance	0
MUS 260	Sophomore Comprehensive	-	MUS 236	Western Art/Music	3
	Musicianship I	3	MUS 260	Sophomore Comprehensive	
MUS 261	Sophomore Comprehensive		MUC 0/1	Musicianship I	3
	Musicianship II	3	MUS 261	Sophomore Comprehensive	2
				Musicianship II	3

MUS 262	Applied Music Major	2	
MUS 263	Applied Music Major	2	
MUS 280	Sophomore Ear Training I	1	
MUS 281	Sophomore Ear Training II	1	
MUS 307	Basic Conducting	3	
MUS 310	Junior Recital Performance I	0	
MUS 311	Junior Recital Performance II	0	
MUS 362	Applied Music Major	2	
MUS 363	Applied Music Major	2	
MUS 462	Applied Music Major	2	
MUS 464	Senior Recital Performance	0	
	Ensembles	7	
	Applied Music Minor (4 semesters)	1	
	Advanced music courses*	6	
Music Manag	gement 20 c	redits	
MUS 125	Survey of the Music and		
	Entertainment Industry	3	
MUS 270	Structure and Content of the Music		
	Industry	3	
MUS 316	Media Use in the Music and		
	Entertainment Industry	3	
MUS 403	Music Management Seminar	1	
MUS 452	Law and Ethics in the Music and		
	Entertainment Industry	3	
Plus seven cr	edits chosen from:**		
MUS 315	Musical Performance in the Media	2	
MUS 303	Music Management Internship	1	
MUS 404	Music Management Honors		
	Internship	6	
MUS 450	Personal Management in Music	3	
School of Ma	nagement 12 c	redits	
ACCT 211	Accounting I	3	
MAN 301	Introduction to Management	3	
LAW 251	Business Law I	3	
MKT 310	Marketing	3	
*300-level or higher			
**Production concentration may substitute one sound			

**Production concentration may substitute one sound recording course

Business concentration must take MUS 450, Personal Management

MUSIC MANAGEMENT MINOR 21 CREDITS Students wishing to minor in music management will be admitted to music management courses depending on availability of space. Students must earn a 3.0 GPA in MUS 125, Survey of the Music and Entertainment Industry, and one additional music management course in order to be admitted to the program. They then complete the sequence outlined below. A 2.5 GPA must be maintained in these courses to continue through the sequence.

MUS 120	Music Appreciation	3
MUS 125	Survey of the Music and	
	Entertainment Industry	3
MUS 270	Structure and Content of the Music	
	and Entertainment Industry	3
MUS 316	Media Use in the Music and	
	Entertainment Industry	3
MUS 450	Personal Management in Music	3
MUS 452	Law and Ethics in the Music and	
	Entertainment Industry	3
	Music elective*	3
*Evolution	musia managomant courses	

*Excluding music management courses

MUSIC EDUCATION (B.M.) REQUIREMENTS/N.J. PUBLIC SCHOOLS, K–12 MUSIC CERTIFICATION

Two concentrations are offered in this program. Students admitted as performance majors in keyboard, guitar or voice ordinarily choose the concentration in preparation for teaching vocal/general music in grades K–12. Students whose performance is on a standard band or orchestral instrument will take the instrumental concentration.

Students are admitted to the music education program on a probationary status for the freshman and sophomore years. Full status as a music education major is determined prior to the beginning of the junior year. (A 2.5 GPA is required.)

Note: Performance majors in keyboard or guitar who want an instrumental concentration must also meet the entrance audition requirements on a band or orchestral instrument outlined previously. Performance majors in keyboard or guitar must meet the entrance requirements for a voice minor, i.e. demonstrate voice potential as a prospective teacher of choral/vocal music in the public schools.

VOCAL CO	· · · · · · · · · · · · · · · · · · ·	EDITS
MUS 000	Recital Hour (7 semesters)	0
MUS 101	Flute and Clarinet	1
MUS 103	Trumpet	1
MUS 105	Violin	1
MUS 107	Guitar	1
MUS 108	Percussion	1
MUS 160	Freshman Comprehensive	
	Musicianship I	3
MUS 161	Freshman Comprehensive	
	Musicianship II	3
MUS 162	Applied Music Major	2
MUS 163	Applied Music Major	2
MUS 164	Functional Class Piano I	1
MUS 165	Functional Class Piano II	1
MUS 166	Voice Class I (not required of	
	voice majors)	1
MUS 167	Voice Class II (not required of voice	
	majors)	1
MUS 180	Freshman Ear Training I	1
MUS 181	Freshman Ear Training II	1
MUS 205	Applied Music Minor	1
MUS 206	Applied Music Minor	1
MUS 207	Music History and Literature I	3
MUS 208	Music History and Literature II	3
MUS 234	Sophomore Recital Performance	0
MUS 260	Sophomore Comprehensive	
	Musicianship I	3
MUS 261	Sophomore Comprehensive	
	Musicianship II	3
MUS 262	Applied Music Major	2 2
MUS 263	Applied Music Major	2
MUS 266	Functional Class Piano: Advanced	
	(or MUS 264)	1
MUS 267	Functional Class Piano: Advanced	
	(or MUS 265)	1
MUS 280	Sophomore Ear Training I	1
MUS 281	Sophomore Ear Training II	1
MUS 301	Form and Analysis	3

ARTS AND COMMUNICATION

MUS 302	Arranging	.3
MUS 305	Applied Music Minor	1
MUS 306	Applied Music Minor	1 ;
MUS 307	Basic Conducting	3
MUS 308	Choral Conducting	2
MUS 310	Junior Recital Performance I	0
MUS 311	Junior Recital Performance II	0
MUS 362	Applied Music Major	2
MUS 363	Applied Music Major	2
MUS 462	Applied Music Major	2
MUS 464	Senior Recital Performance	0

Note: Six semesters of vocal seminar are also required of voice majors.

SECONDARY EDUCATION (K-12)

CERTIFICATION REQUIREMENTS 27 CREDITS Students interested in obtaining teaching certification should see the School of Education and Community Service, Department of Curriculum and Instruction, for further information.

INSTRUMENTAL

CONCENTR	ATION	62 CREDITS
MUS 000	Recital Hour (7 semesters)	0
MUS 101	Flute and Clarinet	1
MUS 102	Double Reeds	1
MUS 103	Trumpet	1
MUS 104	Low Brass	1
MUS 105	Violin	1
MUS 106	Low Strings	1
MUS 107	Guitar	1
MUS 108	Percussion	1
MUS 160	Freshman Comprehensive	
	Musicianship I	.3
MUS 161	Freshman Comprehensive	
	Musicianship II	3
MUS 162	Applied Music Major	2
MUS 163	Applied Music Major	2
MUS 164	Functional Class Piano I	1
MUS 165	Functional Class Piano II	1
MUS 166	Voice Class I	1
MUS 167	Voice Class II	1
MUS 180	Freshman Ear Training I	1
MUS 181	Freshman Ear Training II	1
MUS 207	Music History and Literature	I 3
MUS 208	Music History and Literature	II 3
MUS 234	Sophomore Recital Performa	nce 0
MUS 260	Sophomore Comprehensive	
	Musicianship I	3
MUS 261	Sophomore Comprehensive	
	Music ian ship II	3
MUS 262	Applied Music Major	2
MUS 263	Applied Music Major	2
MUS 264	Functional Class Piano III	1
MUS 265	Functional Class Piano IV	1
MUS 280	Sophomore Ear Training I	1
MUS 281	Sophomore Ear Training II	. 1
MUS 301	Form and Analysis	3
MUS 302	Arranging	3
MUS 307	Basic Conducting	3
MUS 309	Instrumental Conducting	3
MUS 310	Junior Recital Performance I	0
MUS 311	Junior Recital Performance II	
MUS 362	Applied Music Major	2

MUS 363	Applied Music Major	2
MUS 462	Applied Music Major	2
MUS 464	Senior Recital Performance	0
SECONDARY	EDUCATION (K-12)	
CERTIFICATI	ION REQUIREMENTS 2	27 CREDITS
Students inte	erested in obtaining teaching c	ertification
should see th	e School of Education and Com	munity Ser-
vice, Department of Curriculum and Instruction, for fur-		
ther information	tion.	
MINOR REQ	UIREMENTS 1	8 CREDITS
MUS 160-	Freshman Comprehensive	
161	Musicianship I and II	6
MUS 164-	-	
165	Functional Class Piano (2 seme	esters) 2
MUS 180-		
181	Freshman Ear Training I and II	2

COURSES

MUS 207-

208

Unless otherwise noted, all courses are for 3 credits.

Music History

Performing Groups A placement audition and the permission of the conductor required. General education credit may be given to nonmajors for participation in these groups.

Performance Groups (2 semesters)

6

2

MUS 200	Concert Choir
MUS 202	College Chorus (no audition)
MUS 203	Chamber Singers
MUS 211	Concert Band
MUS 212	Preparatory Band
MUS 213	College Community Orchestra
MUS 214	Brass Ensemble
MUS 215	Brass Quintet
MUS 216	Woodwind Ensemble: Clarinet
MUS 217	Woodwind Ensemble: Saxophone
MUS 218	Woodwind Quintet
MUS 219	Percussion Ensemble
MUS 221	WPC-NJ Percussion Ensemble
MUS 222	Jazz Ensemble
MUS 223	Chamber Jazz Ensemble (multiple
	sections)
MUS 224	Jazz Lab Ensemble I (multiple sections)
MUS 225	Jazz Rhythm Section (multiple sections)
MUS 226	Jazz Percussion Lab
MUS 229	Trombone Ensemble
MUS 230	Classical Guitar Ensemble
MUS 231	Twentieth-Century Chamber Ensemble
MUS 233	Jazz Vocal Lab
MUS 235	Latin Jazz Ensemble
MUS 239	Jazz Vocal Workshop
MUS 240	New Jazz Ensemble
1 credit each	

Instrumental Classes Class instruction in basic performance skills on standard instruments. Students proven proficient on an instrument, upon examination, are excused from that class. Classes meet two hours weekly for one semester and are open to music education students only.

MUS 101	Flute and Clarinet
MUS 102	Double Reeds

MUS 103	Trumpet
MUS 104	Low Brass
MUS 105	Violin
MUS 106	Low Strings
MUS 107	Guitar •
MUS 108	Percussion
1 credit each	

MUS 120 Music Appreciation

Development of perceptive listening, concentrating on music from the baroque, classical and romantic periods.

MUS 125 Survey of the Music and Entertainment Industry

Creative and business aspects of the industry. Publishing, copyright, performing rights, mechanical rights, artist's rights, recording companies, production, marketing, merchandising, mass media and sociological implications.

MUS 130 Symphonic Music

A survey of representative European and American symphonies, tone poems and concertos from the eighteenth century to the present.

MUS 137 Jazz Improvisation I

A workshop course aimed at helping the student evolve an individual style of improvisation. Emphasis on chord scales, interpretation of chord symbols, notation, transposition and common jazz figures and patterns. Ear training and analysis of improvised solos.

MUS 138 Jazz Improvisation II

Expansion of concepts and principles introduced in MUS 137. Emphasis on chord substitution, melodic development, memorization, student jazz compositions and ear training and analysis.

MUS 140 Opera

A survey of representative operas from the eighteenth century to the present.

MUS 150 Introduction to Jazz

A performance workshop class for the classical (nonjazz) musician interested in developing basic performance skills in the jazz idiom. Emphasis on style, repertoire and techniques of improvisation.

2 credits

MUS 156, 157, 256, 257, 356, 357, 456, 457 Applied Music Major: Jazz

Individual instruction in piano, voice, percussion, band and orchestral instruments.

3 credits each

MUS 160–161 Freshman Comprehensive Musicianship I and II

The student is prepared to function artistically and intelligently in a variety of musical situations. Focuses on musical literature of all cultures, styles and historical periods; develops a conceptual understanding of rhythm, melody, harmony, texture, timbre and form and their interrelationships as they form the basis for listening, performing and creating. Includes contrapuntal textures in two and three parts, compositional devices, diatonic harmony in three and four parts, secondary dominants and diminished seventh chords, modulation, analysis and composition of music in the smaller contrapuntal and homophonic forms for various vocal and instrumental combinations.

3 credits each

MUS 162, 163, 262, 263, 362, 363, 462, 463 Applied Music Major

Individual instruction in piano, organ, voice, guitar, percussion, band and orchestral instruments for B.M. majors. 2 credits each

MUS 164-165 Functional Class Piano I and II

A beginning course for music majors who do not have keyboard facility. Basic technique is emphasized along with a knowledge of chords. Skills of transposition, improvisation, score reading and accompanying are begun at a simple level.

1 credit each

MUS 166–167 Voice Class I and II

Vocal fundamentals and practical application in developing and preserving the singing voice. Breath control, resonance, range, diction, vowel formation as related to correct tone production. Methods and materials for teaching. Not open to voice majors.

1 credit each

MUS 180-181 Freshman Ear Training I and II

An integrated course that includes the development of sight-singing, dictation and rhythmic skills. Alto and tenor clefs are introduced during the freshman year. 1 credit each

MUS 190, 191, 290, 291, 390, 391, 490, 491

Applied Music Major (B.M.)

Individual instruction in piano, organ, voice, guitar, percussion, band and orchestral instruments. 4 credits each

MUS 205, 206, 305, 306 Applied Music Minor Individual instruction in piano, voice, band and orchestral instruments.

1 credit each

MUS 207–208 Music History and Literature I and II

The growth of Western music from its beginnings through the first half of the twentieth century. Prerequisite: MUS 161

3 credits each

MUS 209 Vocal Seminar

This is a six-semester sequential course for voice majors designed to provide students a working knowledge of foreign language diction for singing and an acquaintance with standard vocal literature.

1 credit each semester

MUS 220 Jazz History

The evolution of jazz from its origins to the present. Emphasis on the various periods and styles of jazz, as well as influential soloists, groups and composers. Live performances in class. For music majors only.

MUS 234 Sophomore Recital Performance

Taken with MUS 263, MUS 291 or MUS 257. 0 credits

MUS 236 Western Art, Music

Analysis and discussion of Western art music from its origins in ancient Greece up to and including contemporary styles. Emphasis on baroque through twentieth-century music. Serves the needs of jazz majors and liberal studies students with some prior background, offering both an educational experience beyond what can be taught in MUS 120.

ARTS AND COMMUNICATION

MUS 241 Jazz Ear Training I

An integrated course in ear training that includes the development of sight-singing, diction, improvisation and rhythmic skills as they especially apply to the jazz style. Prerequisite: MUS 181

1 credit

MUS 242 Jazz Ear Training II

An integrated course in ear training that includes the development of sight-singing, diction, improvisation and rhythmic skills as they especially apply to the jazz style and continuation of Ear Training I.

Prerequisite: MUS 241

1 credit

MUS 243 Survey of Non-Western Music

A survey of non-Western music. Classes include lectures and listening.

MUS 244 Practical Musicianship

Designed for the beginning student with little or no previous musical training. Through involvement with various tasks and activities, along with guidance from the instructor, students master the basic skills of music reading, sightsinging and keyboard facility and gain a knowledge of related theoretical concepts. For students who are not going on with formal music training, this course provides a valuable background for the amateur musician and/or theatre, communication and education major.

MUS 251 Audio Recording I

A laboratory course concentrating on basic audio recording techniques with emphasis on care, maintenance and operation of sophisticated multitrack recording equipment.

MUS 252 Audio Recording II

A continuation of Audio Recording I with greater attention to detail and more emphasis on the degree of perfection in recording; greater variety in recording situations (jazz, classical, small and large vocal and instrumental groups). Prerequisite: MUS 251

MUS 255 Jazz Harmony

Provides an intensive study of chords, voicings and harmonic progressions as they occur in the jazz style. Prerequisite: MUS 161

MUS 260–261 Sophomore Comprehensive Musicianship I and II

The work of the sophomore year continues the comprehensive development of musicianship by the study of literature in the larger contrapuntal and homophonic forms. Specific areas include chromatic harmony and contemporary harmonic and compositional techniques. Considerable analysis of romantic and twentieth-century literature, as well as correlated written projects form the nucleus of this course.

3 credits each

MUS 264–265 Functional Class Piano III and IV This is the second year of the beginning piano course for music majors who do not have keyboard facility and should not be chosen by keyboard majors. The work of this course continues the development of the skills begun in MUS 164–165 with more advanced work in technique, transposition, improvisation, score reading and accompanying and harmonization styles. Music education students must pass a proficiency test upon completion of MUS 265.

1 credit each

MUS 266–267 Functional Class Piano: Advanced

This special section is for keyboard majors and qualified vocal and instrumental majors. The course assumes that the student already possesses considerable keyboard facility. The course is designed to develop the skills needed to utilize the piano in school positions, sacred music posts and situations other than the solo recital. The skills to be developed include transposition, improvisation, score reading, a thorough working knowledge of chords and their application to creating accompaniments and arrangements from lead sheets.

1 credit each

MUS 268-269, 368-369

Functional Class Jazz Piano I, II, III, IV

Students in the jazz studies program who are not jazz piano majors choose these sections for their second year of Functional Class Piano. These courses continue to develop the skills begun in MUS 164–165, with special emphasis on jazz improvisation, accompanying and harmonization styles.

1 credit each

MUS 270 Structure and Content of the Music Industry

Historical aspects of recording and publishing industries and their impact on society. Current trends in publishing and recording, including business structure and role in the industry.

MUS 280–281 Sophomore Ear Training I and II More advanced work in sight-singing, dictation and rhythmic skills with special emphasis on the techniques

required to perform twentieth-century music.

1 credit each

MUS 301 Form and Analysis

Intensive formal, harmonic, rhythmic, melodic and textural analysis of compositions from the Renaissance to the present. Traditional terminology is covered, but the emphasis is on empirical analysis. Prerequisite: MUS 261

MUS 302 Arranging

A practical approach to arranging for choral and instrumental groups. Deals with the problems teachers encounter as directors of musical organizations. Voice leading, part distribution, range, transpositions and musical styles are studied. Prerequisite: MUS 261

MUS 303 Music Management Internship

Designed to provide practical experience for students in that program. Interns experience actual industry functioning. For music management majors only. 1 credit

MUS 304 Studies in Music

An introduction to musicology in a very broad sense of the term. Readings, library projects and research papers are assigned on the history and sociology of music, music theory, ethnomusicology, musical acoustics and the aesthetics of music. Basically interdisciplinary, the course deals with the relationships between these areas and their connections with composition, performance, criticism and pedagogy. Extensive training in the techniques of scholarship, preparation of papers and dissertations and the use of the library. Prerequisite: MUS 261

Basic Conducting **MUS 307**

Presents the basic techniques of conducting, both with and without a baton. These techniques include basic beat patterns, preparation, cut-offs, fermatas, tempos, moods, use of the left hand, etc. Each student conducts, using the class as the performing medium.

Prerequisite: MUS 261

MUS 308 Choral Conducting

Develops and refines the basic techniques of conducting acquired in Basic Conducting. Actual conducting experience applies these techniques to the specific demands of vocal music. Other areas of study include organization and administration of secondary school choral groups, tone and diction and rehearsal techniques. Prerequisite: MUS 307

MUS 309 Instrumental Conducting

Basic conducting techniques applied to the media of orchestra and band. Score reading, rehearsal techniques and interpretation are included in addition to further development of physical skill. Prerequisite: MUS 307

MUS 310 Junior Recital Performance I Taken with MUS 356, 362 or 390. 0 credits

MUS 311

Junior Recital Performance II Taken with MUS 357, 363 or 391. 0 credits

MUS 315 Music Performance in Media

Practical and philosophical aspects of music in audio, visual and live media. Roles, functions and responsibilities involved in media production. Performing and production experience (from the musician's viewpoint) in audio, video and live workshop settings. For music management majors only.

2 credits

MUS 316 Media Use in the Music and Entertainment Industry

Articles, press kits, promotional materials, advertising and the media in industry relations. Roles of artist, public relations representative, advertising company and recording company. Application of communication skills to professional tasks.

Prerequisite: MUS 125

MUS 317 History of American Popular Music Since 1950

Chronological survey including sociological implications, current trends and new directions.

MUS 322-323 Jazz Improvisation III and IV

Continuation of Improvisation II. Prerequisites: MUS 161, 320 and 321 and/or permission of the instructor

2 credits each

MUS 331 Western Music Through Josquin

A detailed study of Western music and its place in society through the death of Josquin des Prez.

MUS 332 Music in the Late Renaissance and **Baroque Periods**

Western music from the sixteenth, seventeenth and early eighteenth centuries is listened to, analyzed and discussed.

MUS 333 Music in the Rococo and Classical Periods

A study of the music from the sons of Bach through Beethoven.

MUS 334 Music in the Romantic Period

An in-depth study of European music and its place in society during the nineteenth century.

MUS 335 Choral Literature

A chronological survey and examination of representative choral compositions from each period of Western music, with emphasis on style and its relation to performance. Music is studied in relation to the cultural environment of its time.

Prerequisite: Permission of the instructor

MUS 336 Accompanying

Provides opportunities for upper-class students and advanced piano majors to study the art of accompanying and to develop potential in this area of piano performance. Prerequisite: Permission of the instructor 1 credit

MUS 341 Composition Class I

A workshop course in musical composition. The instructor assigns specific technical and/or expressive problems. All music is written for instruments or ensembles available in the department, and all works are performed in class or in concert. No stylistic limitations.

Prerequisites: MUS 161 and permission of the instructor

Composition Class II MUS 342

A continuation of Composition Class I with emphasis on contemporary styles and techniques, strict and free serial techniques, proportional and other approximate notations, aleatory procedures, polytonality, etc.

Prerequisites: MUS 341 and permission of the instructor

MUS 380-381 Junior Ear Training

Advanced third-year ear training work, including sightsinging, dictation and rhythmic skills, with special emphasis on the techniques required to perform twentiethcentury music.

1 credit each

ARTS AND COMMUNICATION

MUS 401 Twentieth-Century Music

A survey of contemporary music as exemplified by representative works of the leading composers of the century. Detailed analysis of a limited number of works which represent significant stylistic and expressive trends. Prerequisite: MUS 160

MUS 403 Music Management Seminar

Lectures by industry experts. Résumé critiquing and job entry suggestions.

1 credit

MUS 404 Music Management Honors Internship

Culmination of music management education for students with 3.2 GPA or higher. Assigned to an area in the music industry as an intern, the student gains experience in the business' role in the music and entertainment industry. Students put to practical use the skills learned in music management courses.

Prerequisites: Music management majors only, 3.2 GPA minimum, successful completion of interview with Music Management Honors Internship Screening Committee 6 credits

MUS 408 Advanced Choral Conducting

Provides continued study and practice of choral conducting techniques. Emphasis on developing good vocal tone production in choral groups, style and interpretation in choral literature and program building. Some of the standard larger choral works are studied.

2 credits

MUS 409 Counterpoint

Technique of contrapuntal writing and analysis. Study includes writing two- and three-part textures, as well as parallel analysis of musical literature drawn from several periods and styles.

Prerequisite: MUS 261

3 credits

MUS 410 Maintenance and Repair of Music Instruments

Problems of repair with respect to brass, woodwind, string and percussion instruments. Laboratory sessions

MUS 411 Piano Tuning

Complete explanation and application of tuning acoustic and electric pianos by the equal temperament system. Problems, procedures and exploration of standard techniques.

MUS 412 Music Graphics

The history, theory and practice of preparing graphic music copy.

MUS 413 The Music Business

Provides an understanding of business practice as related to the music industry. Topics covered include contracts, union regulations, dealing with booking agents, personal managers, publishers and producers, instrument sales, operating a music studio or store and other related activities.

MUS 450 Personal Management in Music

Contemporary performers, changing trends in consumer practices and evaluation criteria for musical performances. Field experiences followed by critiques. Systems approach to personal management. For music management majors and minors only.

MUS 452 Law and Ethics in the Music and Entertainment Industry

Legal aspects of the industry. Ethical considerations for management and artists, domestic and international copyrights, contracts, labor agreements, trade practice regulations, piracy, payola. For music management majors and minors only.

MUS 464 Senior Recital Performance

B.M. majors take this with MUS 462; B.M. in classical performance majors take this with MUS 490 and 491; B.M. jazz majors take this with MUS 456 and 457. 0 credits

MUS 470 Jazz Arranging

Introduction to basic concepts and techniques of contemporary arranging. Study of instrumental ranges and transpositions, chord symbolization, rhythm section, notation, etc. Four-part sectional writing with attention to voice leading, blend and textural effects.

Prerequisites: MUS 260 and/or permission of the instructor

MUS 471 Advanced Jazz Arranging

Expansion of the principles introduced in MUS 370. Instructor assigns specific technical and expressive problems aimed at helping the student develop the writing skill and concepts necessary to realize complete arrangements for a large jazz ensemble.

Prerequisites: MUS 260 and/or permission of the instructor

MUS 495 Jazz Styles and Analysis

A practical performance laboratory course with emphasis on style and memorization (melody and chord progressions) of standard tunes most frequently used in jazz and the single engagement field. Prerequisite: MUS 261

MUS 499 Independent Study

As approved and to be arranged. 1–3 credits

Department of Theatre

Professors: W. Grant (producer), B. Gulbranson (chairperson), J. Ludwig, B. Sandberg Assistant Professor: A. Coker Nonteaching Professionals: E. Matthews, D. Sherman

The department offers a B.A. in dramatic arts. To develop the individual's creative potential; to explore human situations and relations in an artistic context, thereby gaining insight into one's own life; and to understand and appreciate the dramatic arts in theory and practice—these are the goals of the dramatic arts program.

The dramatic arts have long been recognized as an endeavor that combines all of the arts, most of the crafts and some of the sciences. For students who wish to increase their theatrical sensibilities, the dramatic arts major program is performance oriented and craft based. The sequence of courses is designed to relate the ancient world to the present day, to bring critical appraisal into direct contact with creative experiment and to provide a fund of life experiences centered upon the comparison and clarification of values—moral, social and personal.

The major program prepares the student for advanced training at the graduate level and employment viability in the theatre, as well as in related areas such as arts administration, communication arts and public relations. A double major combining theatre and communication is available for interested students. For further information, contact the chairperson of either department.

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Acting for Television I

Acting IV: Scene Study

THEA 274

THEA 275

THEA 374	Acting for Television II	3
THEA 375	Acting V: Advanced Scene Study	3
THEA 376	Acting: Musical Theatre Performance	3
THEA 377	Directing for Stage and Media	3
THEA 474	Acting for T.V. Commercials	3
THEA 479	Showcase	3
THEA 483	Children's Theatre	3
Design/Techr	nical Theatre	
THEA 230	Scenery Construction for Stage and	
	Media II	3
THEA 236	Lighting for Stage and Media I	3
THEA 239	Scene Design for Stage and Media I	3
THEA 333	Stage Management	3
THEA 335	Scene Painting I	3
THEA 336	Lighting for Stage and Media II	3
THEA 339	Scene Design for Stage and Media II	3
THEA 435	Scene Painting II	3

COURSES

Unless otherwise noted, each course is for 3 credits.

The first course, THEA 101, is specially designed to satisfy general education requirements.

THEA 101 Introduction to Theatre

An innovative study of the dramatic process covering all facets of play production. The course is approached from the appreciation point of view. Students may choose to satisfy requirements through experiential contractual learning. Purchase of tickets to see plays is required.

THEA 102 Fundamentals of Acting

A practical introduction to the contemporary skills and techniques of acting through exercises designed to develop the student's individual creative abilities and selfconfidence.

THEA 111 Audience Management Laboratory

A practical application of the administrative aspects of audience management. May be repeated. 1 credit

THEA 112 Stagecraft Laboratory

Supervised direction and practiced application of the principles involved in the technical aspects of producing a play. Provision is made for individual and group training in such areas as stage management, lighting, scenery; properties, makeup and sound. May be repeated. 1 credit

THEA 114 Costume Laboratory

A laboratory in costume construction for theatre production with individual instruction in construction techniques. May be repeated.

1 credit

3

3

THEA 115 Production Laboratory

A practical application of the principles of stagecraft. Production-related projects in such crafts as scenic construction, scene painting, properties, lighting and sound. Evening hours required. May be repeated. 1 credit

THEA 117 Performance Laboratory

A practical application in acting under faculty supervision. Work includes rehearsing and performing a play for public presentation. May be repeated for credit. Prerequisite: Audition

1 credit

THEA 130 Scenery Construction for Stage and Media I

Fundamentals of scenery construction are considered in a practical situation. An introduction to the scenery shop and related facilities and equipment and their use within the production framework. The course includes instruction in the techniques of stagecraft and methods of production.

THEA 141 Theatre Management

An investigation of operational procedures including administration, purchase and accounting practices, boxoffice management, publicity, promotion, public relations, policy and decision making and management of theatre personnel.

THEA 170 Acting I: Improvisation

Use of improvisation to explore group expression in a spontaneous mode. Emphasis on physicalization, mime and other nonverbal modes such as theatre games as personal development in the arts of acting.

THEA 230 Scenery Construction for Stage and Media II

Advanced problems in set and property construction are considered in laboratory and practical situations. This course also concerns itself with analysis of various construction problems.

THEA 236 Lighting for Stage and Media I

Training in the problems of lighting design and its application to stage and television production in various forms. Color, rhythm and aesthetic backgrounds are examined in the context of good lighting design.

THEA 239 Scene Design for Stage and Media I

Training in the problems of scenery design for production in various media. Color, line and movement are examined in the context of good design. Individual projects are required.

THEA 252 Broadway Matinees

By reading scripts and viewing plays and other theatrical events, the student develops an understanding of the forms and styles of theatre today and of theatre's role in our culture. Field trips to Broadway and off-Broadway theatres. Attendance at plays and other theatrical events is required.

THEA 261 Playscripts

A study of playscripts in terms of both their functional, narrative content and their theatrical, structural function. Investigation of the reasoning process involved in visualizing the transformation of a script on the page into a play on the stage.

THEA 270 Acting II: Advanced Improvisation

A continuation of the emphases of Acting I. Additionally, Acting II focuses on dramatic processes as they formalize into theatrical performance. The creation of dramatic form (plot, character, setting) as it relates to theme (or message, metaphor) is of particular focus. An introduction to improvisation as a formal theatrical mode.

THEA 272 Acting III: Principles of Characterization

An array of methods to discover and to perform characters from drama, including the use of costume and makeup as creative sources.

THEA 274 Acting for Television I

A course rooted in theory and principles, which introduces students to the nature of television and affords basic on-camera performing experience.

THEA 275 Acting IV: Scene Study

An advanced course in acting techniques with an introduction to various styles and approaches through group scene work.

THEA 289 Introduction to Drama Therapy

A course in the basic principles, methods and practices of the drama therapy process. Provides an overview of the process. Requires four hours of practicum per week in addition to regular classwork.

THEA 333 Stage Management

Introductory training in the duties of the manager in the normal process of producing a play. Audition, rehearsal period, performance and postperformance functions and procedures are examined.

THEA 335 Scene Painting I

A study of the basic styles of theatrical painting. Concentration on dry pigments and casein mediums. Develops in the student a basic ability to interpret the scenic designer's elevations and reproduce them for the stage.

THEA 336 Lighting for Stage and Media II

Advanced training in the problems of lighting design and control as related to their application to production in stage and the media. The use and application of sound effects and the development of sound tapes for theatrical productions are examined.

THEA 339 Scene Design for Stage and Media II

An advanced study of the problems of the scenic designer in theatre, television and film. Concentration is on the areas of materials and techniques. The student is expected to produce models and renderings utilizing various techniques and structures.

THEA 360 History of Theatre

Explores the historical development of dramatic form, the physical theatre and technical theatre arts from ancient Greece to the present. Investigates the social and cultural forces which shaped the theatre and which were shaped by the theatre and develops critical standards of theatre. The student is expected to attend representative theatre productions.

THEA 363 American Theatre and Drama

The study of the development of the American theatre and its drama from the colonial period to the present with emphasis on twentieth-century American drama.

THEA 374 Acting for Television II

An advanced course in television acting which includes challenging work on various modes of dramatic literature adapted to television. In addition, the course features advanced performing techniques and varied experiences with the dramatic television director.

THEA 375 Acting V: Advanced Scene Study

An advanced course centering on role preparation and performance of various modes of drama in the setting of theatre as a comprehensive art.

THEA 376 Acting: Musical Theatre Performance

A supervised study of the techniques appropriate to developing roles in musical theatre. Special attention is given to the interpretation of a musical selection.

THEA 377 Directing for Stage and Media

Principles and theory for the production of plays on stage and on television. Practical experience in guiding performers so that they turn scripts into plays.

THEA 381 Drama for Children

Study of the importance of dramatic process in a child's individual and social growth. Investigation of the dynamics of the creative process within formal drama (children's theatre) and informal drama (creative dramatics).

THEA 385 Field Experiences in Drama and Theatre

Students receive academic credit for guided experiences in drama and theatre in the college community. These experiences include touring productions to area schools, geriatric centers, etc.; drama therapy internships; drama education in local schools and other assignments as determined by the instructor.

THEA 435 Scene Painting II

A continuation of the scenic artist's craft. Advanced techniques, concentrating on the use of analine dyes, are explored.

THEA 446 Theatre Workshop I

Training and experience in the creative process of rehearsing and performing a play before an audience. Through audition, the student is assigned work in one of the following areas: acting, design, technical production or theatre management.

THEA 447 Theatre Workshop II

A continuation of THEA 446.

THEA 448 Theatre Workshop III A continuation of THEA 447.

THEA 454 Playwriting

A study and practice in the basic techniques of playwriting. Emphasizes dramatic structure and characterization developed through the writing of scenes and short plays.

THEA 474 Acting for Television Commercials

Varied experiences rehearsing and performing television commercials.

THEA 479 Acting: Showcase

A directed independent practicum culminating in a public performance.

THEA 483 Children's Theatre

Study of the educational and artistic modes of contemporary children's theatre. Focuses on styles of presentation and children's dramatic literature.

THEA 499 Independent Study

An advanced performance project under faculty supervision.

Prerequisite: Approval of the chairperson

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School of Education and Community Service

School of Education and Community Service

Joan Tuohy Tetens, Dean Office: Raubinger 430

The School of Education and Community Service develops and administers the education components of the College's teacher education programs, including those in community and human services.

By arrangement with the New Jersey State Department of Education, the school recommends its graduates (after they have achieved a satisfactory score on the appropriate NTE) for certification as teachers. These programs are generally acceptable in other states which recognize the standards of the National Council for Accreditation of Teacher Education or the National Association of State Directors of Teacher Education and Certification.

The School of Education and Community Service makes every effort to relate student needs, program innovations and interdisciplinary offerings to the contemporary world. The school has been actively involved in all types of grant programs, especially those in special, bilingual, parent and early childhood education, Head Start, microcomputers and gerontology. In addition, the School of Education and Community Service supervises the Women's Studies Program.

Undergraduate Part-Time and Full-Time Students

Teacher education sequences are available to undergraduate students in the following fields: early childhood, elementary education, special education, physical education, English, history, biology, chemistry, French, Spanish, geography, mathematics, communication, art, sociology and political science.

Early childhood and elementary education candidates must pursue study in an additional academic major in consultation with an education advisor.

Regularly admitted part-time students interested in pursuing a teacher education program must indicate their choice early and apply for admission to a major program. Their last two semesters must be spent in full-time practicum and internship in the area appropriate to the major.

Field Laboratory Experiences

The Office of Field Laboratory Experiences coordinates practicums, which are preliminary teaching experiences in the schools, and the senior teaching internships. Located in Room 206 of Hunziker Hall, the office is directed by Mr. John Huber.

Prerequisites for EDUC 414, Senior Teaching Internship and Seminar, and EDUC 415, Senior Teaching Internship, include:

- 1. Admission to the appropriate major department
- Approval of the individual applicant by the Program Review Committee of the department, which is responsible for certification, based on the following standards:

- a. A cumulative grade point average of 2.50 at the close of the semester immediately preceding the practicum
- b. A cumulative grade point average of 2.50 in the
- academic major and in the teacher education sequence
- c. Satisfactory completion of all preliminary field experiences and courses required in the program
- d. A minimum of 84 credits completed at the end of the semester preceding student teaching
- e. Completion of all requirements based on the freshman basic skills tests in reading, writing and mathematics and the successful completion of ENG 110, Writing Effective Prose, prior to admission to the teacher education sequence
- f. An analysis of speech patterns and problems (if any)
- g. Consideration of additional departmental standards in the form of auditions. physical performance requirements, submission of portfolio, specific skills tests, comprehensive tests, etc.
- 3. In addition, the student must:
 - Have documentation of negative results on the Mantoux test (prior to the initial field experience)
 - b. Apply to the Office of Field Laboratory Experiences by February 1 of the junior year
 - Pay a service fee of \$60 (in addition to tuition fees) prior to the processing of the application for the internship.

Policies for the Internship

The following rules apply to the selection of a cooperating school and teacher for the internship:

- No student will attempt to effect his or her own placement
- An effort is made to place students within reasonable commuting distances, but assignments are based primarily on availability of suitable cooperating teachers and school districts
- 3. The community in which the student lives is generally not used for placement
- Placement is in the major field in a public school district.

The student is supervised and evaluated by a college supervisor and a cooperating teacher in the school district. A grade of P (pass) or F (fail) is assigned by the college supervisor after consultation with the cooperating teacher. Waivers for the field experiences are not authorized.

COURSES

Unless otherwise noted, all courses are for 3 credits.

EDUC 333 Individualized Instruction

A course involving weekly seminars concerning individualized teaching, plus tutoring experiences in selected school systems with innovative or well-tested programs. The course provides an opportunity for students planning to enter a teacher preparation program to determine if they really want to teach. Students arrange a free day for field work when they plan their schedules. By advanced application only with the Office of Field Laboratory Experiences.

1 credit

EDUC 414 Senior Teaching Internship and Seminar

This course meets the student teaching requirement through a full semester program which combines theory and practice. The student is assigned to a public school for an extended period to serve successively as observer, aide, associate and teacher, concluding with full-time teaching. The student becomes familiar with classroom management, teaching strategies, pupil characteristics, the organization of the school and relationships with the community. This model combines theory and practice in an evolutionary situation under the guidance of cooperating teacher and college supervisor. Constant feedback and reinforcement is provided through the required seminar. Prerequisites: See Field Laboratory Experiences

12 credits

EDUC 415 Senior Teaching Internship

Each student is assigned to a public school for an extended period to serve successively as observer, aide, associate and teacher, concluding with full-time teaching. The student becomes familiar with classroom management, teaching strategies, pupil characteristics, the organization of the school and relationships with the community. This model combines theory and practice in an evolutionary situation under the guidance of the cooperating teacher and college supervisor. Constant feedback and reinforcement is provided through a required parallel course approved by the department.

Prerequisites: See Field Laboratory Experiences 12 credits

EDUC 465 In-Service Supervised Teaching Seminar I Meets the needs of the beginning teacher already employed on a full-time annual contract who has not met the student teaching requirement. Areas of attention include classroom management, individualized instruction, lesson planning, pupil evaluation, school-community relations, analysis of pupil behavior patterns and other problems related to the student's work experience. Incorporates biweekly seminar meetings and evaluation visits by the college supervisor to each student's classroom.

Open only to students enrolled in a certification sequence at William Paterson College. No credit is given for EDUC 465 unless EDUC 466 is completed. 4 credits

EDUC 466 In-Service Supervised Teaching Seminar II A continuation of EDUC 465.

4 credits

Women's Studies

MINOR REOUIREMENTS **18 CREDITS** One of the following: 3 POL 272 Politics and Sex WS 110 Women's Changing Roles 3 Racism and Sexism in the United WS 150 3 States Plus five of the following: 3 The Black Woman Experience AAAS 255 Images of Women in Modern ENG 217 3 Literature Nineteenth-Century Women's Voices ENG 219 3 Women, the Bible and Modern ENG 220 3 Literature American Women's History 3 HIST 250 3 HSC 210 Women's Health 3 Philosophy of Sexual Politics PHIL 324 3 PSY 311 Psychology of Women Sex Stereotypes and Discrimination in WS 307 3 Public Education Independent Study WS 499 1-3

COURSES

Unless otherwise noted, all courses are for 3 credits.

WS 110 Women's Changing Roles

A history and analysis of the origins, philosophies, issues and activities of the new women's movement. Deals with sex roles in a changing society and role conflicts of both men and women resulting from this movement. Analyzes the image of women presented in the mass media.

WS 150 Racism and Sexism in the United States What is it like to grow up black or white, male or female in a multicultural society? The course studies the historical, philosophical, social and political treatments and interpretations of blacks and women in the United States. Selected topics include media stereotypes of blacks and women, definitions and rationalizations of racism and sexism, the role that blacks and women have played in U.S. history, the relationship between the nineteenth-century abolitionist movement and the early feminist movement, the relationship between the 1960s civil rights movement and the women's liberation movement.

WS 307 Sex Stereotypes and Discrimination in Public Education

Develops awareness of sex biases in our culture with particular emphasis on the role of the school. Explores methods of eliminating such biases in classroom instruction. An examination of materials currently being used in public schools.

Department of Curriculum . and Instruction

Professors: A. Coletta, J. Feeley, T. Gerne, B. Grant, M. Turkish, G. Vitalone, D. White, S. Wollock Associate Professors: L. Aitken, N. D'Ambrosio, M. Dough-

erty, A. Havriliak (chairperson),

Assistant Professors: J. Huber, D. Lauricella, J. Rockman, S. Wepner

The Department of Curriculum and Instruction offers teacher education programs which provide teaching expertise and state certification in various academic fields and the performing arts. The curriculum and instruction faculty also provides certain certification courses common to all teacher education programs. A list of majors offered by the College with a list of the corresponding teaching certificates (K–12) offered by the department follows.

College Majors	Certification (K-12)
African and African-	
American Studies	Social Studies
Art	Art ,
Biology	Science
Chemistry	Science
Communication	Speech Arts
English	English
French	French
Geography	Social Studies
History	Social Studies
Mathematics	Mathematics
*Music	Music
Political Science	Social Studies
Sociology	Social Studies
Spanish	Spanish

*Music is not an acceptable academic major for elementary education or early childhood education majors.

The Department of Curriculum and Instruction supervises a B.A. in early childhood, a B.A. in elementary education and two graduate degrees.

Requirements -

GENERAL EDUCATION All students must complete the general education requirements as prescribed by the College and a major in addition to the teaching major.

ACADEMIC MAJOR Students have several options to complete their academic majors in the elementary education and early childhood education programs. All programs should be developed with a faculty member from the department.

CERTIFICATION REQUIREMENTS To be eligible for certification in early childhood education, elementary education or secondary education, students must complete a prescribed teacher education program. This program is an intensive one in the theoretical and practical aspects of teaching that culminates in a full semester in-

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ternship in a school system. Additional certification requirements are also mandated by the state of New Jersey. Among these is successful performance on the National Teacher Examination.

Students interested in seeking certification in these areas are urged to seek advisement from the department as early as possible in the education program.

Secondary Education

In addition to general education requirements, an academic major and special courses that major departments may require of students seeking subject field certification, students must also complete the following to obtain teaching certification from the Department of Curriculum and Instruction.

CERTIFICATI	ON REQUIREMENTS	27 CREDITS
ELED 310	Educational Psychology	3
RLA 330	Reading Strategies for the Co	ntent
	Area	3
SED 290	Secondary Practicum I	1
SED 325	Classroom Management and	
	Materials	3
SED 351	Field Experience and Semina	r:
	Stratum 1	2
SED 409	Methods in Secondary Educa	tion 3
EDUC 414	Senior Teaching Internship a	nd
	Seminar*	12

Early Childhood Education

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MAJOR REQU	JIREMENTS	30 CREDITS
EC 190	Introduction to Early Childho	od 3
EC 200	Practicum in the Preschool	1
EC 202	Creative Experiences in Early	
	Childhood	2
EC 220	Reading and the Young Child	2
EC 230	Early Childhood Curriculum	I 3
EC 300	Practicum in Kindergarten an	d
	Primary	2
EC 321	Early Childhood Curriculum	11 2
EC 364	Workshop in Reading and	
	Language Arts	3
EDUC 414	Senior Teaching Internship an	nd
	Seminar*	12

Elementary Education

MAJOR REQU	JIREMENTS 30 CRED	ITS
ELED 103	The Elementary School	2
ELED 320	Strategies for Teaching Language Arts	2
ELED 324	Strategies for Teaching Mathematics	2
ELED 325	Strategies for Teaching Fine Arts	2
ELED 327	Strategies for Teaching Science	2
ELED 328	Strategies for Teaching Social Studies	2
PEED 310	Strategies for Teaching Health and	
	Physical Education	2
RLA 329	Foundations of Reading	2
ELED 401	Practicum in Elementary Education	2
EDUC 414	Senior Teaching Internship and	
	Seminar*	12

*See Field Laboratory Experiences.

COURSES

Unless otherwise noted, all courses are for 3 credits.

EC 190 Introduction to Early Childhood

An overview of the field of early childhood education. The unique qualities of the learning process in early childhood education are examined. Various child development programs are analyzed, with special emphasis on observation techniques. Teaching methods are emphasized.

EC 200 Practicum in Pre-K

In the practicum experience, students are assigned to work in preschool centers and, in addition, meet with the practicum coordinator for evaluation and coordination. The experience includes observation, working with individual and small groups of children, assisting the cooperating teachers and teaching planned lessons when appropriate.

Prerequisites: See Field Laboratory Experiences 1 credit

EC 202 Creative Experiences in Early Childhood Exploration and discovery in music, visual arts, movement and other expressive media appropriate for young children. Emphasis is on creative activities as modes of perception and integration fundamental to human growth and learning. The student is guided in acquiring knowledge of techniques and materials for fostering aesthetic development in the child.

2 credits

EC 210 Infant Care Programs

Focuses on the infant and toddler years, birth to three. Emphasis on the developmental process and the relation of development to environmental supports. Helps educators of young children design and maintain appropriate learning environments for infants and toddlers. Topics include play and cognition, language development, effects of early group care, scheduling the childs day, planning programs.

EC 220 Reading and the Young Child

Explores and develops knowledge of reading as a process and a subject, including its relation to the nature of the child and the learning process. Emphasis on the fundamentals of the developmental teaching of reading at all ages and stages and the application of same to individual and group instruction.

2 credits

EC 221 Early Childhood: The Young Child and Language Arts

A study of the language skills of preschool, kindergarten and primary children with an emphasis on listening, speaking, spelling, handwriting and creative writing. Techniques for developing and evaluating these skills within the curriculum. Also considers creative expression, dramatic play and children's literature.

EC 230 Early Childhood Curriculum I

A study of the integrated and organized activities which meet the educational, psychological, sociological and cultural needs of children 3–5 years of age. Principles of curriculum development are combined with appropriate teaching procedures and techniques. A concurrent practicum is required.

EC 300 Practicum in Kindergarten and Primary

A teaching-learning experience with children in grades K-3. Students observe, assess and work with small groups and, eventually, teach the whole class. Regularly scheduled seminars are held as part of the course.

Prerequisites: See Field Laboratory Experiences

EC 321 Early Childhood Curriculum II

The role of correlated experiences from the fields of social studies, children's literature, science, art, music, health and safety, play and games in the education of the young child. 2 credits

EC 340 Parent Involvement in Early Childhood Education

A study of the components of parent involvement, including home-school communication, classroom tasks for parents, parent education, policy making, home learning activities, the importance of parent involvement, parenteffectiveness training and parent-teacher conferences.

EC 341 Bilingual Education: Theory and Practice in Early Childhood

Examines programs and related research in bilingual education, especially for young children of Spanish-speaking populations. Emphasizes the rationales for and methods of implementing bilingual programs in a sociocultural context.

EC 351 Mathematics in Early Childhood Education

A detailed study of the number system, the four fundamental operations and such general information mathematics as is needed by children of the first three grades. The student becomes acquainted with the literature of the subject, including modern texts, recent developments in the field of arithmetic and approved methods of testing.

EC 364 Workshops in Reading and Language Arts A study of the development of language arts skills in preschool, kindergarten and primary children with an emphasis on diagnostic-prescriptive teaching of reading. The organization and presentation of appropriate content and the use and interpretation of assessment instruments in listening, speaking, writing and reading are explored and practiced with children having varied levels of skills.

ELED 103 The Elementary School

Current and changing perspectives in education as they apply to the organization of the elementary school, including implications for current development and teacher preparation. Team teaching, open classroom, middle school and other experimental settings are explored. In addition, classroom management and its relation to curriculum, correlation work in language arts, social studies, science, mathematics, health and physical education and fine and practical arts are also topics of this course. Prerequisites: See Field Laboratory Experiences 2 credits

ELED 203 The Urban School Experience

Provides prospective teachers with a preparation experience in an urban school. The class meets one day per week for 150 minutes in an urban school. It combines the tutoring of individual school children and an on-site seminar. The tutoring is supervised by a college instructor with the assistance of school personnel.

ELED 204 Intuitive Geometry for the Elementary School

Provides elementary school teachers with the basic concepts of position, shape and size. An informal study of the fundamental properties which characterize certain significant geometric configurations in the space of our environment.

ELED 205 New Jersey Studies for Teachers

Develops the student's understanding of the comprehensive scope of New Jersey studies. Its content is drawn from the social and natural sciences, incorporating significant concepts and generalizations. Provides a content base for prospective teachers preparing to meet state studies requirements and needs.

ELED 210 Growth Processes of the School-Age Child

Principles and applications of the growth and thinking processes which affect school-age children and their learning environment are explored. The course offers an in-depth study of the child from age 4–16. An overview of infancy and late adolescence is included.

ELED 310 Educational Psychology

The science of psychology applied to the art of teaching. Practical approaches in developing the habit of applying principles and theories developed by psychologists. The student is encouraged to think about personal educational development.

Prerequisite: PSY 110

ELED 320 Strategies for Teaching Language Arts

Acquaints students of elementary education with the role of language and its development in the life of a child. Methods, techniques and materials used to develop the listening, speaking, writing and reading skills of children are critically examined. Attention is given to the effective uses of literature and to current practices in teaching skills such as handwriting, spelling and grammar. Includes also the preparation of lesson plans, program organization and procedures for reporting progress in the language arts. 2 credits

ELED 324 Strategies for Teaching Mathematics

Purposes, principles and techniques of teaching elementary school mathematics. Effective lesson planning, motivation, drill, manipulative materials, problem solving, evaluation and remedial techniques are some of the topics covered. The work is related to field experiences. 2 credits

ELED 325 Strategies for Teaching Fine Arts

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Direct experiences in fine art activities, including objectives and philosophy of fine arts. The developmental stages of children in creative and mental growth are explored.

2 credits

ELED 327 Strategies for Teaching Science

How to help students develop their ability to introduce scientific facts, ideas and methods of problem solving in the classroom. Includes planning a science program for the elementary school, selecting and presenting information and ideas in the classroom, selecting appropriate books, supplies and equipment and the use of field trips. Work is related to field experiences.

2 credits

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ELED 328 Strategies for Teaching Social Studies

The aims, methods, materials and organization of social studies instruction for the elementary school. Emphasis on interdisciplinary organizational patterns and inquiry methods of instruction. Work is related to field experiences.

2 credits

ELED 401 Practicum in Elementary Education

Students are assigned to work in an education center. In addition, they meet with the practicum coordinator weekly for evaluation and coordination. The practicum experience is correlated with certain methods courses and educational psychology.

Prerequisite: ELED 103

2 credits

LMS 323 Modern Educational Media

An examination of the role of educational media in the learning process. Emphasis on nonprint hardware and equipment. The organization and maintenance of media hardware in the library/media center is studied along with actual student utilization of equipment in a laboratory setting. Individual mediated projects which successfully communicate an instructional message are required.

RLA 105 Reading Laboratory

Intended for adult readers who are functioning at a presecondary level because of education/social/economic disadvantage or because English is not their first language, this course is designed to develop the student's basic generalized reading skills. Vocabulary and comprehension development as well as study skills are stressed. In addition to the scheduled class session, students attend a reading laboratory session designed to reinforce and extend the practice of basic reading skills.

RLA 107 Introduction to College Reading

Develops and increases the student's reading vocabulary, comprehension and study skills. Also stresses flexible reading approaches applicable to various materials including the student's college texts. Credits do not count toward degree requirements.

RLA 109 College Reading and Rate Improvement

Developed for entering students who score just below the WPC cut-off on the NJCBSPT. College Reading and Rate Improvement is an accelerated, eight-week course designed to help students sharpen generalized reading skills needed for success in college and to improve reading efficiency.

2 credits

RLA 325 Literature for Children and Young Adults A survey of literature, past and present. Techniques for critiquing various genres of literature, telling stories, preparing study guides, using book selection aids and creating interest in literature. Strategies for bringing students and books together are emphasized.

RLA 329 Foundations of Reading

The psychological and linguistic foundations of the reading process. Emphasis on how learners develop the ability to read and understand increasingly difficult and diverse materials through their school years. Stresses classroom techniques for teachers.

2 credits

RLA 330 Reading Strategies for the Content Areas Reading skills and knowledge needed by the content area teacher: the subject area materials, different modes of learning, causes of reading difficulties and methods of preparing materials and students for improved reading performance. Students develop a case study of a reader as he or she interacts with appropriate content area materials.

RLA 425 Reading Practicum

The application of reading theory. The student works with youngsters or adults in need of tutoring or special instruction. Emphasis on planning, teaching and evaluating lessons. A log of experiences must be maintained. Students are supervised by college staff.

SED 290 Field Experience I

Provides a bridge between theory and practice. Observation of necessary skills such as responsibility and cooperation, taking instruction, being on time and remaining on the job. At the elementary school level, this experience permits the college student to observe and aid the classroom teacher in a variety of activities, excluding the actual teaching of the class. Must be taken in the junior year.

Prerequisites: See Field Laboratory Experiences 1 credit

SED 303 Music Education I

A functional introduction to methods, materials and curricula appropriate for general classroom music in grades K-6.

SED 325 Classroom Management and Materials The course recognizes that effective teachers are also effective classroom managers, that the classroom is a social setting and that instructional materials involving visual arts contribute to a productive learning environment. The secondary education student plans, develops, conducts, evaluates and shares classroom activities and learning experiences in order to acquire a repertoire of ideas and tactics useful in classroom management.

SED 351 Field Experience and Seminar: Stratum I A series of professional laboratory experiences designed to provide students regular opportunities for observation in intermediate and junior high schools and for extended participation as teacher aides and paraprofessionals in the school. Students meet in a seminar to share their observations, analyze their problems and further develop skills and resources.

Prerequisites: See Field Laboratory Experiences 2 credits

SED 381 Educational Sociology

Acquaints the student with basic concepts of human relationships, analyzes selected problems of the contemporary social order and provides opportunity for individual research in the area of students' special needs and interests. Consideration is given to such topics as the following and their relationship to public education: housing, race, crime and delinquency, teacher-community relationships, community action and cultural relations.

SED 407 Music Education II

An overview of the music program in the junior and senior high school. Consideration of methods, techniques, media, materials and research in teaching music at the secondary level. Emphasis on the general music class, the organization and development of vocal and instrumental groups, high school music appreciation and theory and related arts programs.

SED 409 Methods in Secondary Education

This course is designed for those intending to teach secondary school subjects. It gives special attention to the objectives, concepts, methods and materials that are significant in an instructional program for the high school. Forms and procedures for instructional planning (including media, evaluation and materials) are defined, designed, implemented and tested to develop classroom competencies.

Department of Educational Leadership

Professors: J. Baines, E. Bell, S. Chao, W. Willis Associate Professors: J. Gallo, J. Mamone, J. Peer, E. Petkus (chairperson) Assistant Professor: V. Baldassano

The Department of Educational Leadership offers the following undergraduate courses.

COURSES

Unless otherwise noted, all courses are for 3 credits.

EDLA 401 School and Consumer Education: A Quality of Life Approach

A "quality of life approach" to the study of consumerism and organizational arrangements for consumer education programs offered by public schools.

EDLA 402 Schools, Manpower and Careers: Education for the Future

Considers manpower development and career-oriented education provided by public schools. Topics include implementation of career education in a technological society, the manpower of revolution, career alternatives for the future and schools and manpower policies.

EDLA 403 Legal and Financial Aspects of the Operation of Public Schools

Provides an introduction to legal and financial aspects of the operation of public schools: legal responsibilities, rights and duties of teachers, problems in securing and allocating funds for public education and related topics.

EDLU 209 Violence in the Community

The causes, patterns and functions of violence. Violence is studied as an extension of biology. A course in the sociobiology of violence in human communities.

EDLU 210 Drug Use and Abuse

A survey of aspects of basic psychological and legal information on drug use and abuse. Some fieldwork is included.

EDLU 482 Inner-City Children and Their Environment

The problems of the inner-city child. Environmental factors are examined in terms of race, ethnic origin, and socioeconomic background, showing how these factors affect a child's capacities, self-concept, motivation and intellectual potential. A critical review of literature dealing with low-income youth in urban areas.

Department of Movement Science and Leisure Studies

Professors: J. Jable, S. Silas Associate Professors: L. Dye, S. Laubach, J. Manning, W. Myers, V. Overdorf (chairperson) Assistant Professors: S. Becker, P. Huber

The Department of Movement Science and Leisure Studies offers a major program leading to the bachelor of science degree in physical education with the opportunity to concentrate in adapted physical education, athletic training, elementary and secondary physical education, coaching and sports officiating, exercise physiology, recreation and leisure studies, aquatics and dance. In addition to core courses and performance skills, at least one concentration must be completed to meet degree requirements. Field laboratory experiences include pre-internship, intradepartmental practicum and student teaching opportunities. Students seeking certification in both health and physical education are afforded this opportunity through interdisciplinary studies. Minors are offered in athletic training, adapted physical education, dance, exercise physiology, recreation and physical education. Elective courses are offered to satisfy, in part, the general education requirement and to fulfill recreational outlets. Extensive cocurricular programs in dance, intramurals and recreation are open to all undergraduates.

Assessments and Retention

Providing students continued advisement and academic counseling is of major concern to the Department of Movement Science and Leisure Studies. The faculty is also concerned about standards of quality in its graduates.

The department maintains a performance standard by which students are reviewed for continuing eligibility as majors. Details of this performance standard are provided by department advisors to those who intend to major in physical education.

MOVEMENT	SCIENCE
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MAJOR REQUIREMENTS

43 CREDITS

Core Courses	29 cred	lits
BIO 118	Basic Anatomy and Physiology	4
PEAC 150	Introduction to the Profession of	
	Movement Science and Leisure Studies	1
PEAC 250	Kinesiology	3
PEAC 251	Standard First Aid and Personal Safety	2
PEAC 252	Cardiopulmonary Resuscitation	1
PEAC 254	History and Philosophy of Sport and	
	Physical Activity	3
PEAC 255	Adapted Physical Education	3
PEAC 350	Physiology of Exercise	3
PEAC 353	Psychology of Motor Learning	3
PEAC 354	Tests and Measurements	3
PEAC 450	Psychosocial Dimensions of Sport	3

Movement Science

Performance	Skills	14 credits
PEAK 156	Movement Science Performance	2
	Skills 1	2
PEAK 157	Movement Science Performance	2
	Skills II	2
PEAK 256	Movement Science Performance	2
	Skills III	2
PEAK 257	Movement Science Performance	2
	Skills IV	2
PEAK 356	Movement Science Performance	2
	Skills V	2
PEAK 357	Movement Science Performance	2
	Skills VI	2
PEAK 456	Movement Science Performance	2
	Skills VII	2

Concentrations for Majors

in Movement Science

PHYSICAL EDUCATION TEACHER CER-

TIFICATION	REQUIREMENTS (K-12)* 30 CREDITS	
PSY 210	Developmental Psychology 3	
PETC 395	Curriculum and Teaching Physical	
	Education in the Elementary School 3	
PETC 396	Curriculum and Teaching Physical	
	Education in the Secondary School 3	
PETC 397	Practicum I: Elementary School	
	Experience 1	
PETC 398	Practicum II: Secondary School	
	Experience 1	
PETC 495	Seminar in Physical Education 1	
EDUC 415	Senior Teaching Internship 12	
RLA 330	Reading Strategies for the Content	
	Areas 3	
WS 150		
or		
AAAS 150	Racism and Sexism in the United	
	States 3	

*PSY 110 and HSC 120 must also be completed for certification, but may be applied to fulfill general education requirements.

In addition, a speech competency test must be passed or an appropriate speech course, recommended by a speech pathologist, must be completed. Students must have a 2.5 GPA in the major and overall to be eligible for teacher certification.

See the section on Field Laboratory Experiences for additional certification requirements.

Those seeking certification are required to take the national teachers exam in physical education during their last semester.

HEALTH EDUCATION

CERTIFICATION ENDORSEMENT 24 CREDITS This certification program is for physical education teaching majors only.

BIO 170	Basic Microbiology	3
BIO 302	Basic Genetics	3
HSC 200	Consumer Health	3
HSC 300	Community Health	3
HSC 320	Nutrition	3
HSC 451	Methods in Health Education	3
HSC 490	Human Sexuality	3
SOC 203	Marriage and the Family	3

ADAPTED PHYSICAL

15 CREDITS EDUCATION All course prerequisites must be fulfilled. Physical Education for the **PEDA 360** Orthopedically Handicapped

PEDA 362	Physical Education for the Mentally	
	Retarded	3
PEDA 460	Physical Education for the Perceptually	
	Impaired and/or Emotionally	
	Disturbed	3
PEDA 462	Exercise Programs for Older Adults	3
PERE 390	Introduction to Therapeutic	
	Recreation	3

ATHLETIC TRAINING*†

23 CREDITS

3

All course pi	rerequisites must be fulfilled.	
HSC 320	Nutrition	3
PEAC 251	Standard First Aid and Personal Safety	2
PEAC 252	Cardiopulmonary Resuscitation	1
PEAT 267	Prevention and Care of Athletic	
	Injuries	3
PEAT 368	Athletic Training Modalities	2
PEAT 369	Biomechanics of Athletic Injuries	2
PEAT 367	Advanced Athletic Training	3
PEAT 467	Fieldwork in Athletic Training	2
PEAT 468	Seminar in Athletic Training	2
PEDA 360	Physical Education for the	
	Orthopedically Handicapped	3

*Teacher certification is recommended in the state of New Jersey to assist in obtaining a job. Licensure in the state of New Jersey is required.

†The Athletic Training program is accredited by the national governing board of the National Athletic Trainers Association.

EDUCATION AND COMMUNITY SERVICE

DANCE		18 CREDITS
(Also offered	as a minor open to all students	s) -
PEDN 280	Modern Dance I	2
PEDN 281	Modern Dance II	2
PEDN 283	Ballet I	2
PEDN 284	Ballet II	2
PEDN 380	Choreography	3
PEDN 381	Advanced Choreography and I	Dance
	Production	3
PEDN 376	Dance Performance Workshop	o I
	(registration by audition only)	2
	Electives	2

Note: First-level courses in ballet or modern dance may be omitted if the student exhibits a high level of technical proficiency and theoretical knowledge. This is determined by written exam and audition only. If high enough technical achievement is established, the student may go on to a second-level course. The credits may be compensated for by enrollment in another dance elective.

EXERCISE PH	IYSIOLOGY	15 CREDITS
HSC 320	Nutrition	3
PEAC 251	Standard First Aid and Person	al Safety 2
PEAC 252	Cardiopulmonary Resuscitation	on 1
PEEP 386	Graded Exercise Testing and	Exercise
	Prescription	3
PEEP 388	Leadership Training in Exercis	se
	Programs	3
PEEP 484	Internship I in Exercise Physic	ology 1
PEEP 485	Internship II in Exercise Phys	iology 1
PEEP 486	Internship III in Exercise Phy-	siology 1

Note: Upon completing this concentration, students are eligible to take the certification test given by the YMCA or the American College of Sports Medicine.

RECREATION AND

LEISURE STUDIES		18 CREDI	TS	
(Also offered	(Also offered as a minor open to all students)			
PERE 290	Foundations and Programs in			
	Recreation		3	
PERE 292	Recreational Leadership		3	
PERE 294	Camp Counseling		3	
PERE 390	Introduction to Therapeutic			
	Recreation		3	
PERE 490	Organization and Administrate	ion of		
	Recreation Programs		3	
PERE 491	Fieldwork in Recreation		3	
COACHING A	COACHING AND OFFICIATING 12 CREDITS			
PEAT 267	Prevention and Care of Athlet	ic		
	Injuries		3	
PECO 476	Organization and Administrat	ion of		
	Athletics		3	
Plus 6 credits from among the following:				
PECO 370	Coaching and Officiating Field	d Hockey	2	
PECO 371	Coaching and Officiating Volle	eyball	2	
PECO 372	Coaching and Officiating Soco	er	2	
PECO 373	Coaching and Officiating Bask	ketball	2	
PECO 374	Coaching and Officiating Soft	ball	2	
PECO 470	Coaching and Officiating Foot		2	
PECO 471	Coaching and Officiating Gym	nnastics	2	

PECO 472	Coaching and Officiating Swimming	2
PECO 473	Coaching and Officiating Wrestling	2
PECO 474	Coaching and Officiating Tennis	2
PECO 475	Coaching and Officiating Track and	
	Field	2
AQUATICS	12 CRE	DITS
PEAQ 263	Advanced Life Saving	2
PEAQ 265	Water Safety Instructor	2
PEAQ 363	Administering and Conducting	
	Recreational Water Activities and	
	Programs	2
PEAQ 463	Pool Management	2
PECO 472	Coaching and Officiating Swimming	2
PEEL 221	Basic Skin and Scuba Diving	2

MINOR REQUIREMENTS

All course prerequisites must be met before admission to minor concentrations. Please see advisors for appropriate prerequisites.

MOVEMENT SCIENCE ELECTIVES

The following courses are open to all students. These courses are designed to allow students to acquire skills in sports and dance.

Combatives	2
Target Archery	2
Badminton	2
Bowling	2
Golf	2
Tennis I	2
Tennis II	2
Fencing	2
Volleyball	2
Karate I	2
Karate II	2
Judo	2
Afro-Caribbean Dance	2
Folk, Square and Ballroom Dance I	1
Folk, Square and Ballroom Dance II	1
Movement Skill Development	2
Personal Fitness	2
Horseback Riding	2
Jogging and Orienteering	2
Backpacking	2
Cycling	2
Basic Skin and Scuba Diving	2
Racquetball	2
Aerobics	2
Personal Movement Analysis	3
SCIENCE GENERAL EDUCATION	
	Target Archery Badminton Bowling Golf Tennis I Tennis I Fencing Volleyball Karate I Karate I Karate II Judo Afro-Caribbean Dance Folk, Square and Ballroom Dance I Folk, Square and Ballroom Dance II Movement Skill Development Personal Fitness Horseback Riding Jogging and Orienteering Backpacking Cycling Basic Skin and Scuba Diving Racquetball Aerobics Personal Movement Analysis

Required Fitness for Life **PEGE 150** 3 Electives PEAO 204 **Elementary Swimming** 2 PEEL 201 Badminton 2 Golf 2 PEEL 203 PEEL 204 Tennis I 2 PEEL 223 Aerobics 2 Impact of Sport in the Modern World 3 PEEL 240 PEGE 340 Social History of Western Sport 3

COURSES

Unless otherwise noted, all courses are for 3 credits.

PEAC 150 Introduction to the Profession of Movement Science and Leisure Studies

Familiarizes the student with the movement science and leisure studies program; possible careers that require knowledge about movement science and leisure studies. Students visit various professional sites in the field. 1 credit

PEAC 250 Kinesiology

An analysis of human motion: articulation of the various body joints, functions of muscles. Analysis of physical education activities from these perspectives. Prerequisite: BIO 118

PEAC 251 Standard First Aid and Personal Safety

Develops an individual's first aid capabilities. Provides the skills of initial emergency care necessary to sustain and maintain life support until qualified medical personnel arrive. The current American Red Cross instructor's manual and updated tests for standard first aid and personal safety are the bases for the course. Students who successfully complete the course receive a certification from the American National Red Cross.

2 credits

PEAC 252 Cardiopulmonary Resuscitation

The correct techniques of external chest compression and mouth-to-mouth resuscitation are stressed. Students learn to recognize early warning signs, risk factors and symptoms. Students who successfully pass the course, after being evaluated by an authorized CPR instructor, receive certification through the American National Red Cross. 1 credit

PEAC 254 History and Philosophy of Sport and Physical Activity

The study of physical activity and sport from preliterate times to the present day Emphasis on nineteenth- and twentieth-century sports and physical education.

PEAC 255 Adapted Physical Education

A general study and application of adaptive techniques and procedures for handicapped children in physical education. A practicum is taken concurrently with this course. Prerequisite: BIO 118

PEAC 350 Physiology of Exercise

The body's physiological response to exercise with consideration to age, sex, physical fitness and environmental stresses. The laboratory provides experiences that replicate theoretical constructs.

Prerequisites: BIO 118 and PEAC 250

PEAC 353 Psychology of Motor Learning

Acquaints the student with the concepts and principles involved in motor learning; in particular, the implications for teaching are considered.

Prerequisite: BIO 118

PEAC 354 Tests and Measurements

A study of the role of evaluation in physical education. The organization and administration of a testing program. Also, appropriate statistical methods used in a testing program.

PEAC 450 Psychosocial Dimensions of Sport A study of sport in relation to the concepts, theories and principles of psychology and sociology. Enables the student to understand the human organism's involvement in sport and physical activity and the relationship of sport to culture and society.

Prerequisites: PSY 110 and SOC 110

PEAK 156 Movement Science Performance Skills I Introduction to skill development and basic concepts: soccer, speedball, field hockey, basketball, folk dance. 2 credits

PEAK 157 Movement Science Performance Skills II Introduction to skill development and basic concepts: volleyball, square dance, ballroom dancing, softball, track and field.

2 credits

PEAK 198 Basic Conditioning

Students learn about and experience conditioning programs for fitness and/or various sports activities. Students work with the professor to design a program suitable for their individual needs.

1 credit

PEAK 200 Beginning Tennis

Students are introduced to the basic skills of tennis which enable them to play a limited game.

1 credit

PEAK 230 Recreational Games

Development of performance proficiency in bowling. Recreational games include such activities as shuffleboard, quoits, horseshoes, table tennis, frisbee and noncompetitive and new games. Lab fee required. 1 credit

PEAK 256 Movement Science Performance Skills III Introduction to skill development and basic concepts: football, lacrosse, conditioning, tumbling. 2 credits

PEAK 257 Movement Science Performance Skills IV Introduction to skill development and basic concepts: gymnastics, tennis, golf. 2 credits

PEAK 356 Movement Science Performance Skills V Introduction to skill development and basic concepts: modern dance, badminton, wrestling, self-defense. 2 credits

PEAK 357 Movement Science Performance Skills VI Introduction to skill development and basic concepts: racquetball, swimming, archery, orienteering, new games. 2 credits

PEAK 456 Movement Science Performance Skills VII Introduction to skill development concepts: fencing, bowling, team handball, recreational games, outdoor education.

2 credits

PEAQ 204 Elementary Swimming

This course equips the individual with basic water safety skills and knowledge in order to help ensure safety while in, on or near the water.

2 credits

PEAQ 227 Diving

To equip the individual with the basic fundamentals of diving. Instruction includes forward, back, reverse, inward and twist dives. The coaching and officiating of diving as it pertains to a competitive situation are also included.

1 credit

PEAQ 228 Synchronized Swimming

The student learns to perform modern synchronized strokes and stunts. Students experience swimming in rhythm with others to choreographed routines. 1 credit

PEAQ 263 Advanced Lifesaving

Techniques of rescuing individuals from the water. Instruction in self-rescue and the use of equipment. Advanced lifesaving certificates are awarded upon successful completion of criteria established by the American Red Cross.

Prerequisite: PEAQ 204 or permission of the instructor 2 credits

PEAQ 265 Water Safety Instructor

The instruction of advanced lifesaving and the nine strokes of swimming. Emphasis is placed on the student's ability to instruct other students in the class. All phases of swimming instruction are covered. Water Safety Instructor Certificate is awarded upon successful completion of criteria established by the American Red Cross.

Prerequisite: PEAQ 263 2 credits

PEAQ 363 Administering and Conducting Recreational Water Activities and Programs

A study of the various recreational activities conducted at pools, lakes and shore areas. The individual gains an understanding of the water and the types of programs best suited to each environment.

2 credits

PEAQ 463 Pool Management

A study of the general principles of pool management. Emphasis on the technical aspects of pool equipment and machinery as well as organizational procedures for directing the pool.

2 credits

PEAT 267 Prevention and Care of Athletic Injuries Lecture and laboratory work concerned with the prevention and care of common athletic injuries: preventing sprains, strains, bruises, friction burns and blisters. Other first aid methods such as artificial respiration, hemorrhage, fracture, unconsciousness are also covered. The responsibilities and legal limitations of treatment are em-

phasized. Prerequisites: BIO 118 and PEAC 250

PEAT 367 Advanced Athletic Training

Lecture and laboratory experiences concerned with care and prevention of athletic injuries using advanced techniques of treatment and rehabilitation. Includes professional ethics, measurement and evaluation, current research, advanced exercise and advanced taping techniques.

Prerequisites: PEAT 267, 368 and HSC 320

PEAT 368 Athletic Training Modalities

Practical experience in the athletic training room under the supervision of a qualified athletic trainer. Student learns various techniques of treatment and taping, plus the use of basic modalities with whirlpool, infrared lamp and hydrocollator. A minimum of 200 hours is required. Prerequisite: PEAT 367

2 credits

PEAT 369 Biomechanics of Athletic Injuries

The second practical experience in the athletic training room under the supervision of a qualified athletic trainer. Focuses on advanced techniques of treatment and taping, the use of advanced modalities in diathermy, the medcosonolator and ultrasound and electrical stimulation. Students apply these advanced techniques by assisting with the athletic teams. A minimum of 200 hours is required.

Prerequisite: PEAT 368 2 credits

PEAT 467 Fieldwork in Athletic Training

An advanced practical experience in which students combine all the skills and techniques of Internship I and II and are taught how to function as the primary sports trainer for a team other than football. Also includes the selection, construction and fitting of orthotics. Minimum of 200 hours.

Prerequisite: PEAT 369 2 credits

PEAT 468 Seminar in Athletic Training

Culminating practicum. The student serves as an athletic trainer in a designated local high school in cooperation with the local and college supervisor. Prerequisite: PEAT 467

2 credits

PECO 360 Olympic and Rhythmic Gymnastics

Advanced skills culminating in the creation of individual routines in competitive events.

Prerequisites: One semester ballet, tumbling and apparatus, or permission of the instructor

PECO 370 Coaching and Officiating Field Hockey Techniques and principles of coaching and officiating field hockey are stressed. Laboratory experiences are provided

for officiating and coaching. Prerequisite: PEAK 156 or permission of the instructor 2 credits

PECO 371 Coaching and Officiating Volleyball

Advanced offensive and defensive team strategies, rules and officiating. Includes laboratory experiences in coaching and officiating. The student is also exposed to various teaching and evaluating techniques.

Prerequisite: PEAK 157 or permission of instructor 2 credits

PECO 372 Coaching and Officiating Soccer

Techniques and principles of coaching and officiating soccer. Laboratory experiences are provided for officiating and coaching.

Prerequisite: PEAK 156 or permission of the instructor 2 credits

PECO 373 Coaching and Officiating Basketball Fundamental and advanced skills as well as theories of offense and defense are learned by the student. Techniques of officiating, organizing and administering a basketball team in a high school program are stressed. Prerequisite: PEAK 156 or permission of the instructor 2 credits

PECO 374 Coaching and Officiating Softball Techniques and principles of coaching and officiating softball are emphasized along with laboratory experience for officiating and coaching.

Prerequisite: PEAK 157 or permission of the instructor 2 credits

PECO 375 Coaching and Officiating Baseball Techniques of coaching, officiating, purchasing and caring for equipment and playing areas are emphasized. Prerequisite: PEAK 157 or permission of the instructor 2 credits

PECO 470 Coaching and Officiating Football Prepares students for coaching football in high schools. Fundamentals, strategy of offensive and defensive play, purchase and care of equipment and other administrative problems are emphasized.

Prerequisite: PEAK 256 or permission of the instructor 2 credits

PECO 471 Coaching and Officiating Gymnastics Intended for the future coach and/or judge in gymnastics. Film analyses and judging tests are offered.

Prerequisite: PEAK 257 or permission of the instructor 2 credits

PECO 472 Coaching and Officiating Swimming Fundamentals of aquatic activities through analyzing strokes and teaching procedures, planning and officiating swimming meets, organizing and administering an aquatic program.

Prerequisite: PEAQ 204 or permission of the instructor 2 credits

PECO 473 Coaching and Officiating Wrestling Designed to prepare wrestling officials for certification through classroom and practical application. The areas of team coaching, officiating, recruiting and meet organizing are also included.

Prerequisite: PEAK 356 or permission of the instructor 2 credits

PECO 474 Coaching and Officiating Tennis

Designed to make students knowledgeable about the process involved in selecting and coaching a tennis team. In addition, the techniques necessary to become a rated tennis official are included.

Prerequisite: PEAK 257 or permission of the instructor 2 credits

PECO 475 Coaching and Officiating Track and Field Techniques and methods of coaching and officiating, including laboratory experiences in officiating and evaluation of facilities and equipment. 2 credits

PECO 476 Organization and Administration of Athletics

Constructed as a coordinator of all courses dealing with an athletics program. Emphasis on the organization of the program and its administration in relation to all personnel involved.

PEDA 360 Physical Education for the Orthopedically Handicapped

Familiarizes prospective teachers with various types of physical handicaps. Exercises, games and activities for the correction or treatment of specific disabilities. A 15- to 20-hour practicum is involved.

Prerequisite: PEAC 255

PEDA 362 Physical Education for the Mentally Retarded

Identifies cause and nature of mental retardation. Practice in implementing group and individual physical education programs for the mentally retarded child. Practicum required.

Prerequisite: PEAC 255

PEDA 460 Physical Education for the Perceptually Impaired and/or Emotionally Disturbed Identifies nature and cause of impairment. Practice in implementing physical education programs for impaired persons. Practicum required.

Prerequisite: PEAC 255

PEDA 462 Exercise Programs for Older Adults

Prepares students to plan and conduct basic physical activity and exercise programs for the elderly. Although the emphasis is on exercise routines and fitness programs, students also learn to lead older adults in rhythmic and dance activities and recreational games. A three-week training period is followed by a twelve-week practical experience at a senior citizen site (nutrition site, day care center or some other senior citizen center). Weekly seminars are held in conjunction with the practical experiences.

PEDN 130 Introduction to the Art of Dance

Elementary technique, improvisation, studies in composition, lectures, films and discussions on dance theory, philosophy and current trends of dance. Provides a background with which to appreciate dance as an audience member. Geared for students without previous dance experience.

PEDN 275 History of Dance

A survey course of dance as part of world history from pre-Christian civilization to the present. Studies from the early fifteenth century (when dance manuals first appeared) are emphasized. Participation in Renaissance and baroque period dances. Readers of Labanotation may use the language of dance as a research method.

PEDN 280 Modern Dance I

An introductory course in contemporary dance. Emphasis on developing the student's appreciation of the art of dance through experiential understanding of the movement principles of the Humphrey-Weldman-Limon school of modern dance.

2 credits

PEDN 281 Modern Dance II

Continuation of the study of Humphrey-Weldman-Limon based modern dance. Relates its principles to teaching, performing, recreation and therapy. 2 credits

PEDN 283 Ballet I

Theory and performing techniques of classical ballet at the beginning level. Based on the Royal Academy of Dancing system of training.

2 credits

PEDN 284 Ballet II

Theory and performing techniques of classical ballet at the advanced-beginner level. Based on the Royal Academy of Dancing syllabus.

2 credits

PEDN 288 Modern Jazz Dance Technique

Theory and performance of modern jazz dance technique. 2 credits

PEDN 289 Beginning Tap Dance

A basic course in theory and practice of tap dance and a study of this American art form. 2 credits

PEDN 376 Dance Performance Workshop I

Performance on an intermediate/advanced technical level and choreography in a workshop situation. Emphasizes field experience performing, choreographing and producing a dance concert for educational purposes. Prerequisite: Registration by audition only 2 credits

PEDN 377 Dance Performance Workshop II

A continuation of Dance Performance Workshop I. The student takes a role of creative leadership in choreography and production.

Prerequisite: PEDN 376 2 credits

PEDN 380 Choreography

Dance composition on a beginning level for teachers, recreation leaders and performers.

Prerequisite: Four credits in modern dance and/or ballet

PEDN 381 Advanced Choreography and Dance Production

Choreography on an advanced level. Study of production techniques for dance. Field experience choreographing and producing a dance concert.

Prerequisite: PEDN 380

PEDN 440 Dance Exercise Leadership Training

Prepares students to teach dance classes in schools and recreational organizations. Deals with the hows and whys of dance movement.

Prerequisite: PEDN 280 or 380 or permission of the instructor

2 credits

PEDN 473 Labanotation

Reading and dancing repertory from Labanotation scores. Helps students understand movement, improve performing ability and provides written and spoken terminology. Prerequisites: PEDN 280 and 283

PEED 310 Health and Physical Education Programs in the Elementary School

Focuses on the objectives and philosophy of health and physical education programs in today's elementary schools. Student lesson plans are required. Participation by students in a spectrum of physical education activities. Required for elementary education majors. 2 credits

PEED 311 Movement Education

A different approach toward teaching where a more individualized program is set up with the larger group (class). Students become aware of the basic movements of the body in relation to time, space and force at their own rate according to ability level.

2 credits

PEEL 109 Combatives

This course introduces the student to measures of protection aimed at safe-guarding life and limb. Unlike PEEL 209, Karate I, it focuses on escape and avoidance. The student, however, is taught the rudiments of striking, kicking and blocking sensitive areas of the body to initiate attacker discouragement.

2 credits

PEEL 200 Target Archery

Development of skill in target archery and a survey of other popular forms of archery. 2 credits

PEEL 201 Badminton

Development of skill in badminton, including basic strokes and playing strategy. 2 credits

a creano

PEEL 202 Bowling

Students learn the aiming approach and delivery for a strike and various techniques involved in picking up spares. The class is conducted at a bowling alley. 2 credits

PEEL 203 Golf

The development of basic fundamentals including grip, stance, swing and putting. Elementary game strategy incorporating terminology involving rule interpretation is also included.

2 credits

PEEL 204 Tennis I

Designed for the beginning player, students learn the basic strokes, namely, forehand, backhand, serve and volley. Game strategies, court etiquette, match observations and rules are also included.

2 credits

PEEL 205 Tennis II

Development of performance proficiency in tennis. A study of the various skills in tennis and their applications in a game situation.

2 credits

PEEL 206 Fencing

An introduction to skills and techniques of foil fencing. 2 credits

PEEL 207 Volleyball

Designed for students with little or no experience with the game. Fundamental skills, strategy and rules are learned. 2 credits

PEEL 209 Karate I

Introduces students to the basic principles of weaponless self-defense. With the empty hand, students are taught the elementary techniques of blocking, parrying, kicking and punching. Close combat measures are also covered, along with the code of moral and ethical responsibilities that come with learning this art form.

2 credits

PEEL 210 Karate II

This course is a refinement of Karate I. Advanced applications of technique and multiple uses for single techniques are covered.

Prerequisite: PEEL 209 2 credits

PEEL 211 Judo

This course deals with self-defense through execution of throwing and landing techniques. Although students are taught the location of vital points and striking areas, the primary focus of the class is to prepare students against attacks by physically teaching principles of inertia and balance.

2 credits

PEEL 212 African-Caribbean Dance

A beginning course in African and Caribbean dance forms. 2 credits

PEEL 213 Folk, Square and Ballroom Dance I

This course includes performance of the fundamental skills of contemporary square dance, folk dance and couples ballroom dancing.

1 credit

PEEL 214 Folk, Square and Ballroom Dance II

Includes performance of the intermediate skills of contemporary square dance, folk dance and couples ballroom dancing, including ability to teach these dances. 1 credit

PEEL 215 Movement Skill Development

This course explores the early stages of skill development. 2 credits

PEEL 216 Personal Fitness

A course designed to help students develop a commitment to a lifetime of fitness.

2 credits

PEEL 217 Horseback Riding

This course is designed to provide equestrian education in the English style of walk, trot and canter. Also included are stable techniques in grooming, bridling, saddling and care of equipment.

2 credits

PEEL 218 Jogging and Orienteering

Orienteering: Teaches students how to find their way with a map and compass to a given destination through an unknown area. Physiological and social benefits are discussed. Jogging: An introduction to, and active participation in, jogging. Exercise principles and the mechanics of running presented.

2 credits

PEEL 219 Backpacking

Students are introduced to backpacking as a recreational pursuit. Hiking techniques and skills are developed. Surviving in the wilderness is also discussed. 2 credits

PEEL 220 Cycling

A course to introduce the fundamentals of bicycle riding and its availability as a low impact aerobics activity. 2 credits

PEEL 221 Basic Skin and Scuba Diving

Designed to provide diving education in the use, care and styles of diving equipment, physiology, physics, dive tables and decompression schedules, first aid and communication. Completion of the course entitles the student to a scuba check-out card. Students desiring the basic certification card issued by the National Association of Skin Diving Schools can fulfill the certification requirements by completing two additional, independent lessons with the instructors.

2 credits

PEEL 222 Racquetball

Designed to provide students the basic concepts of playing the game of racquetball, including emphasis on fundamental skills, rules and regulations and strategy. 2 credits

PEEL 223 Aerobics

A complete aerobic fitness program that utilizes various rhythmic exercise regimens to help students understand and feel the effects of physical conditioning. 2 credits

PEEL 250 Personal Movement Analysis

This course is based upon a system established by Rudolf Laban, which brings clarity to the understanding and performance of functional and expressive movement. As a language, Laban Movement Analysis provides an objective vocabulary to observe and describe dynamic qualities of movement, actions of the body, changes in body shape and architectural space. This course is especially helpful to those interested in anthropology, art, communication, dance, education, fitness, psychology, theatre, sociology; writing and management.

PEEP 386 Graded Exercise Testing and Exercise Prescription

Theoretical information about the administration and application of a graded exercise stress test.

PEEP 388 Leadership Training in Exercise Programs Students learn to organize, lead and supervise programs of physical exercise and conditioning in industrial, business, recreational, educational and athletic settings. Also, how to use results of diagnostic tests to prescribe appropriate activities for a wide variety of populations.

PEEP 482 Advanced Exercise Physiology

Advanced concepts concerning the physiological adaptions of man and animals to exercise. With these concepts established, the student then explores the more controversial issues of exercise physiology.

PEEP 484 Internship I in Exercise Physiology

Practical information about the administration and application of a graded exercise stress test and an exercise prescription.

Prerequisite: PEAC 350 1 credit

PEEP 485 Internship II in Exercise Physiology

A second-level experience in which students obtain practical information about the administration and application of a graded exercise stress test and an exercise prescription.

Prerequisite: PEAC 350 1 credit

PEEP 486 Internship III in Exercise Physiology

A third-level experience in which students obtain practical information about the administration and application of a graded exercise stress test and an exercise prescription. Prerequisite: PEAC 350

1 credit

PEGE 150 Fitness For Life

A study of the general nature and structure of exercise and fitness as it pertains to the individual. The purpose of this course is to assist the individual in gaining an understanding of the effects of exercise, sports and physical activity on the physical and psychological self. Emphasis is placed on the physiological, sociological and biological development of the individual student through planning a personal program.

PEGE 240 The Impact of Sport in the Modern World Sport is a prominent entity with a great impact on modern life. To help the student understand the extent of that impact, this course examines the many meanings of sport for the American people through: (1) an evaluation of the influences of sport on America's youth, its educational institutions and its communities-from village to metropolis; (2) an investigation of the promotion of sport by the mass media, the business community and government; (3) an analysis of the role of sport in such complex issues as gender and racial stereotyping and discrimination; (4) an examination of the relationship of sport to such contemporary concerns as violence and drug abuse; and (5) an investigation of America's participation in international sport.

Prerequisites: SOC 110 and PSY 110

PEGE 340 Social History of Western Sport

This course provides a view of Western civilization through the window of sport. Building on the conceptions already established in the two Western civilization courses required for General Education, it helps to close some of the unavoidable gaps left by earlier political, economic, religious, cultural and ideological analyses of Western society. The study of sport not only broadens students vision of life and culture in the Western world, but also enhances their understanding of it.

Prerequisites: HIST 101 and HIST 102

PERE 290 Foundations and Programs in Recreation

A study of the nature, scope, history and philosophy of recreation, its meanings, the services rendered in various settings, its relationship to allied disciplines and scientific foundations.

PERE 292 Recreational Leadership

A study of methods, materials and skills necessary for persons preparing to assume leadership roles in recreational programs.

PERE 293 Programs in Recreation

The study of public, voluntary and private recreation programs sponsored by governments, education, industry and other organizations. Considerations are given to administration, financial support, facilities and leadership.

PERE 294 Camp Counseling

A study of the nature and duties of counseling in private, municipal and organizational camps. Techniques of group work and the planning, organizing and executing of programs are included.

PERE 305 Community Recreation

A study of community recreation with emphasis on history, theory and philosophy; governmental involvement; other social institutions; current principles and practices.

PERE 306 Recreation Facilities and Management

A study of the design and management of facilities and areas for leisure enjoyment, including use of existing facilities, feasibility studies, site selection, principles of planning, construction and maintenance procedures.

PERE 390 Introduction to Therapeutic Recreation Provides an in-depth study of therapeutic recreation for the ill and handicapped in various settings. Emphasis on the role of recreation as a means of therapy in rehabilitation. Internship experience is undertaken.

PERE 482 Leisure Crafts and Activities in Recreation

A study of leisure crafts through creative activities with a multiplicity of craft media. Focuses on program implementation with various types of groups.

PERE 490 Organization and Administration of Recreation Programs

The exploration of major problems and practices in the organization and administration of recreational programs in various settings.

PERE 491 Fieldwork in Recreation

An internship that enables the student to observe techniques of and practice in a recreational setting. The student is assigned to a recreation program.

Prerequisites: See Field Laboratory Experiences

PETC 395 Curriculum and Teaching Physical Education in the Elementary School

The principles of curriculum development in elementary school physical education programs. Students learn how to teach physical education activities designed for elementary school children. Taken concurrently with PETC 397. Prerequisite: Admission to teacher certification program

PETC 396 Curriculum and Teaching Physical Education in the Secondary School

The physical education teachers role in facilitating the adolescent students growth and development through movement activities. A variety of teaching styles are explored. Includes administrative duties and responsibilities of the physical education teacher at the second level. Taken concurrently with PETC 398.

Prerequisite: Admission to teacher certification program

PETC 397 Practicum I: Elementary School Experience

In this prestudent-teaching experience, the student is assigned to work in a school for the purpose of observing and assisting the experienced physical educator. Experiences include working with individuals and small groups and teaching the entire class. Taken concurrently with PETC 395.

Prerequisites: Admission to teacher certification program; see also Field Laboratory Experiences

PETC 398 Practicum II: Secondary School Experience

This experience in the school is correlated with methods of teaching physical education and human movement. Primarily devoted to teaching classes and small groups. Taken concurrently with PETC 396.

Prerequisites: PETC 397; see also Field Laboratory Experiences

1 credit

PETC 495 Seminar in Physical Education

Current trends and developments in public education are explored. Particular attention is given to classroom management and problems that confront student teachers. The course is conducted during the semester of the student teaching experience.

1 credit

DEPARTMENT OF SPECIAL EDUCATION AND COUNSELING

Professors: L. Hayes, L. Hummel, R. Klein, M. Swack, W. Younie (chairperson) Associate Professors: E. Abare, S. Kuveke Assistant Professor: M. Goldstein

The Department of Special Education offers intensive specialized study leading to a bachelor of arts degree in special education. The major emphasizes the area of mental retardation along with emotional disturbance, physical handicaps and learning disabilities. The department offers many practical experiences in classroom management. Students are exposed to instructional materials used in the education of exceptional children and are presented with various modes of curriculum planning for these children. Students majoring in special education are prepared for teaching positions in all areas, with the exception of the blind and the deaf, in public and private schools and residential institutions. They are eligible, upon successful completion of the program, to be certified as teachers of the handicapped by the state of New Jersey. Graduates may teach the maladjusted, multiple handicapped and orthopedically handicapped.

Entrance Requirements

Students who wish to major in special education must present documented evidence of having worked with handicapped children for 120 clock hours in nonpublic schools prior to matriculation. Students do not receive academic credit for this requirement.

Two practica, SPED 200 and SPED 320, are required of all majors in their sophomore and junior years. These practica afford the student the opportunity to work with handicapped children in a public school, private or state institution or government agency.

The Office of Field Laboratory Experiences or the Department of Special Education may be contacted for further information.

MAJOR REQ	UIREMENTS 36 CRED	DITS
CODS 261	Speech Disorders	3
PEAC 255	Adapted Physical Education	3
PSY 110	General Psychology	3
SOC 110	Principles of Sociology	3
SPED 201	Psychology and Education of the	
	Handicapped	3
SPED 301	Education of the Trainable Mentally	
	Retarded	3
SPED 302	Education of the Educable Mentally	
	Retarded I	3
SPED 303	Education of the Educable Mentally	
	Retarded II	3
SPED 410	Counseling and Vocational Guidance	
	for Handicapped Children	3
SPED 411	Prescriptive Teaching	3
SPED 412	Education of the Emotionally and	
	Socially Maladjusted	3
SPED 413	Education of the Neurologically	
	Impaired and Physically Handicapped	3
PROFESSIONAL SEQUENCE 30 CREI		ITS

A. Field Experience 16 credits SPED 200 Prepracticum Special Education 2 SPED 320 Practicum in Special Education 2 Student Teaching 12 EDUC 415 **B.** Professional Sequence 14 credits CSP 410 **Educational Testing** 3 **ELED 310** Educational Psychology 3 Foundations of Reading RLA 329 2 SPED 304 Teaching Reading to the Mentally Retarded 3 3 **SPED 411** Prescriptive Teaching

EDUCATION AND COMMUNITY SERVICE

SPECIAL EDUCATION	
CONCENTRATION	21 CREDITS
This course sequence is for students in a	another major who
wish to take courses in special educati	on.

mon to take t	courses in special education.	
SPED 201	Psychology and Education of the	-
	Handicapped	3
SPED 301	Education of the Trainable Mentally	
	Retarded	3
SPED 302	Education of the Educable Mentally	
	Retarded I	3
SPED 303	Education of the Educable Mentally	
	Retarded II	3
SPED 304	Teaching Reading to the Mentally	
	Retarded	3
SPED 410	Counseling and Vocational Guidance	
	for Handicapped Children	3
SPED 411	Prescriptive Teaching	3

COURSES

Unless otherwise noted, all courses are for 3 credits.

CSP 410 Educational Testing and Evaluation

This course explores the concepts important to an understanding of the evaluation process. In examining the nature of these interactions, steps in the measurement process and procedures of assessment are viewed in a way that assures the educational judgments and decisions required for more effective instruction.

SPED 200 Prepracticum in Special Education

Students who plan to take SPED 201, Psychology and Education of the Handicapped, must apply for the prepracticum or first practicum in special education. One full day per week is required for fieldwork so students should plan their schedules carefully. Students may request a particular location, but this cannot be guaranteed. Prerequisites: See Field Laboratory Experiences 2 credits

SPED 201 Psychology and Education of the Handicapped

A study of the social, emotional, physical and learning characteristics of handicapped children. Methods of diagnosis and differentiation, curriculum and teaching techniques, materials, resources and their employment for education. Psychological basis of the suitable curriculum. Introductory course for special education majors.

SPED 205 Early Childhood Curriculum for Handicapped Children

An in-depth study of the characteristics and needs of preschool handicapped children. Emphasis on teaching techniques, materials and programs most appropriate for these children.

SPED 207 The Disabled in America

The intent of this course is to define the disabled population in the United States and to identify their present legal rights and protections in regard to housing, financial aid, job discrimination, barrier-free environments, social settings and education. The history of the disabled is reviewed so that the student can better understand present value systems and ethical viewpoints.

SPED 210 Education of the Profoundly Retarded

Provides students the developmental model of training and educating profoundly retarded children and adults. Examines homes, schools and institutions, as well as new alternatives for delivering care.

SPED 215 Rights of the Handicapped

Litigation and legislation relating to the rights of handicapped persons considered within a sociological and educational context. Resultant ideologies and issues are explored in relation to the changing role of the special educator.

SPED 301 Education of the Trainable Mentally Retarded

Methods for educating mentally retarded children who would not benefit from classes for the educable mentally retarded. Instructional materials, techniques and resources. Study of existing programs on a state and national level. One-day per week practicum in a special education classroom of a participating school is included.

Prerequisites: SPED 201; see also Field Laboratory Experiences

SPED 302 Education of the Educable Mentally Retarded I

Methodology and curriculum development for the mentally retarded at primary and intermediate levels. Organization and planning activities and materials, use of resources, selection of equipment, records and reports, guidance, health and welfare services. A one-day per week practicum in a special education classroom of a participating school is included.

Prerequisites: SPED 201; see also Field Laboratory Experiences

SPED 303 Education of the Educable Mentally Retarded II

Methodology and curriculum for the mentally retarded at junior and senior high levels. Consideration of employment opportunities. Job analysis, guidance and placement procedures. A one-day per week practicum in a special education classroom of a participating school is included. Prerequisite: SPED 302

SPED 304 Teaching Reading to the Handicapped

Acquaints teachers for the mentally retarded with techniques for teaching reading. Emphasis on the effective use of these techniques to meet the special needs of the mentally retarded. Recent developments in the treatment of children with learning and perceptual problems. A oneday per week practicum in a special education classroom of a participating school is included.

Prerequisite: SPED 201 Corequisite: SPED 302

SPED 320 Practicum in Special Education

Students are assigned to work in a variety of special education centers. The practicum is the second half of the junior field experience in special education. The first half is completed concurrently with SPED 302. The student spends one full day per week in a participating school. Experiences include observation of exceptional children and teaching individuals and small groups under supervision. Students register for this course with the Office of Field Laboratory Experiences the semester prior to taking SPED 303.

Prerequisites: SPED 200 and 302 Corequisite: SPED 303

SPED 410 Counseling and Vocational Guidance for Handicapped Children

A study of existing rehabilitation resources in the community. The contributions and services of the rehabilitation team to children and their families. The availability of those services and guidance as to their uses are stressed.

Open to seniors only

SPED 411 Prescriptive Teaching

Methods for applying various special teaching techniques to the diagnosis and education of the child with multiple handicaps. Integration of perceptual, motor, sensory and management approaches. A practicum comprises a part of this course. Open to seniors only.

SPED 412 Education of the Emotionally and Socially Maladjusted

The identification and classification of emotionally disturbed and socially maladjusted children. A study of the organization of classes and teaching methods. A small number of seniors enrolled have the option of assignment to a special section in conjunction with the Therapeutic Tutoring Program. Information relating to this program is provided in a bulletin available from the department. The program may not be offered every semester.

Open to seniors only

SPED 413 Education of the Neurologically Impaired and Physically Handicapped

Presents learning problems stemming from physical handicaps and neurological impairment in children with basically normal intelligence and sensory abilities. Includes therapies, teaching techniques, procedures for assessment of progress and an exploration of basic and recent literature.

Open to seniors only

SPED 499 Independent Study As approved and to be arranged. 1–3 credits -× .

School of Health Professions and Nursing

School of Health Professions and Nursing

Rosetta F. Sands, Dean Office: Hunziker Wing 120

The School of Health Professions and Nursing offers bachelor's degrees in communication disorders, community health and nursing.

Programs in this school prepare students for professional practice and educational roles in health care agencies and schools. The school also offers courses in health for students in other majors.

Department of Communication Disorders

Associate Professors: E. Chopek, J. Hsu (chairperson), A. Oratio Lecturer: C. Taub Director of Speech and Hearing Clinic: G. Bergen

The undergraduate program leading to a bachelor of arts in speech pathology requires that students complete 60 credits of general education courses and 30 credits in the major. Ninety hours of supervised clinical experience must be completed in the WPC Speech and Hearing Clinic.

The department also offers a 5½ year bachelor's/ master's option that requires the successful completion of 39 credits of major courses at the undergraduate level. These credits include three graduate-level courses which are taken in the senior year. Students selecting this option must complete 150 hours of supervised clinical experience in the College's Speech and Hearing Clinic.

Following completion of the B.A. degree requirements, students must apply for admission to the graduate program. Matriculation into the graduate program is contingent upon meeting the department's stated criteria.

MAJOR COU	RSES 30-36 CRE	DITS
CODS 160	Phonetics	3
CODS 205	Speech Laboratory I (Observation)	3
CODS 262	Orientation to Speech Pathology and	
	Audiology	3
CODS 263	Articulation Disorders	3
CODS 302	Speech Laboratory Continuing*	
	(three semesters)	39
CODS 361	Anatomy and Physiology of the	
	Auditory and Vocal Mechanism	3
CODS 363	Introduction to Audiology	3
CODS 366	Language Theory and Therapy	3

*Only 9 credits of CODS 302 count toward the 128 credits required for graduation.

CODS 462	Auditory Rehabilitation	3
SPED 201	Psychology and Education of the	
	Handicapped	3

51/2 Year Bachelor's/Master's Option

UNDERGRADUATE SPEECH

PATHOLOGY	COURSES	30-39 CREDITS
CODS 160	Phonetics	3
CODS 205	Speech Laboratory I (Ob	servation) 3
CODS 262	Orientation to Speech Pa	thology and
	Audiology	3
CODS 263	Articulation Disorders	3
CODS 302	Speech Laboratory Conti	nuing**
	(four semesters)	3-12
CODS 361	Anatomy and Physiology	of the
	Auditory and Vocal Mech	anism 3
CODS 363	Introduction to Audiolog	y 3
CODS 366	Language Theory and Th	erapy 3
CODS 462	Auditory Rehabilitation	3
SPED 201	Psychology and Educatio	n of the
	Handicapped	. 3

GRADUATE SPEECH

PATHOLOGY COURSES: To

be taken in the senior year;		9 CREDITS
CODS 500	Computers and Statistical Prin	nciples
	for Clinical Research	3
CODS 506	Stuttering and Other Rhythm	
	Disorders	3
CODS 603	Voice Disorders	3

GRADUATE SPEECH

PATHOLOGY COURSES: To be

completed within 1 ¹ / ₂ years			
after receiving the B.A. degree [†] 33 CREDITS			
CODS 604	Language Disorders in Children	3	
CODS 605	Aphasia	3	
CODS 606	Diagnostic Methods in Speech		
	Pathology	3	
CODS 607	Speech and Hearing Science	3	
CODS 608	Clinical Audiology	3	
CODS 609	Clinical Practicum (2 semesters)	6	
CODS 610	Cleft Palate and Related Maxillo		
	Facial Disorders	3	
or			
CODS 622	Neurologically Based Speech		
	Disorders	3	
CODS 619	Research Methods in		
	Communication Disorders	3	
CODS 620	Project Thesis Seminar	3	
CODS 621	Psycholinguistics and Language		
	Acquisition	3	
**Only 15 c	credits of CODS 302 count toward the 1	28	
credits required for graduation.			
tSee the WE	PC graduate catalog for course description	ne	

+See the WPC graduate catalog for course descriptions.

COURSES

Unless otherwise noted, all courses are for 3 credits.

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CODS 160 Phonetics

The course focuses on the perception and production of the sounds of American speech. The International Phonetic Alphabet (IPA) is mastered as a system for analyzing speech patterns and for recording pronunciations. There are many opportunities to use the IPA when reading phonetic transcriptions, as well as transcribing into IPA samples of normal speech and defective speech.

CODS 161 The Nature of Speech, Language and Communication Systems

A general orientation to the study of human language communication. Topics include the nature of the speech signal, the structure and content of language, the nature of communicative interaction, human vs. animal communication, the relationship between language and thought, dialect variation and bilingualism, the relationship between the written and spoken system.

CODS 162 Basic Speech Skills

Enables students to develop maximum vocal and articulatory output, control the speech mechanism, eliminate regional accents; explores the impact of dialectical differences that impair communication.

CODS 205 Speech Laboratory I

Through weekly seminars and supervised observation of a minimum of 25 hours of speech and/or language therapy, this course exposes the student to all aspects of the speech-language clinical process.

Prerequisite: CODS 263

CODS 261 Speech Disorders

A course for students who are not communication disorders majors. Focuses on the normal acquisition and development of speech and language and on the organic and functional factors which interfere with normal acquisition and development. The role of the special education teacher in the school speech therapy program is considered.

CODS 262 Orientation to Speech Pathology and Audiology

The purpose of this introductory course is to bring beginning students of communication disorders an understanding of speech, language and hearing disorders. Emphasis is on the nature and causes of communication disorders. Discussion of treatment is limited to general principles since remedial methods are studied in greater detail in more advanced communication disorders courses.

CODS 263 Articulation Disorders

A study of the normal acquisition and development of articulation and of etiologies; assessment and remediation for articulation disorders. Prerequisite: CODS 262

CODS 302 Speech Laboratory Continuing

The course is part of a three semester program of clinical practicum in speech-language pathology, offering a minimum of 90 clock hours of supervised clinical experience, accompanied by group seminar and individual conferences. It provides students the opportunity to learn the essential elements of effective clinical interaction and to experience the basic therapeutic processes involved in modifying articulatory/language behaviors. Prerequisites: CODS 160, 262, 263, 205 and 366

1 credit each semester

CODS 361 Anatomy and Physiology of the Auditory and Vocal Mechanism

Designed to analyze the processes of speech and hearing in terms of anatomy and physiology. Specific aspects of speech including respiration, phonation, articulation and resonation are presented. The ear and hearing are also discussed. Finally, the nervous system is studied in terms of its function as an integrating mechanism. Various pathologies as they relate to speech and hearing are also considered.

Prerequisite: BIO 120

CODS 363 Introduction to Audiology

Introduces students to the elements of hearing and sound and relates these elements to the basic principles of audiological evaluation. Prerequisite: CODS 361

CODS 365 Voice Disorders in Children

Functional and organic voice disorders in children. Etiology, classification, methods of diagnosis and evaluation, therapy methods and techniques.

Prerequisite: CODS 361

CODS 366 Language Theory and Therapy

A review of the nature of human language. The course focuses on the acquisition of language in normally developing children and also describes the nature of language disorders, assessment techniques and intervention strategies.

CODS 367 Sign Language I

Designed to teach sign language and the manual alphabet to health professionals, speech pathologists, rehabilitationists and teachers of children with special problems so they can work with children and adults who have a need for an alternate means of communication.

CODS 370 Sign Language II

Designed to strengthen further the manual communication skills of health professionals, speech pathologists, rehabilitationists and teachers of children with special problems.

Prerequisite: CODS 367

CODS 404 Seminar in Student Teaching

Latest trends and developments in speech pathology and audiology. Problems of classroom management are discussed. This course is conducted during the semester of the student teaching experience.

CODS 425 Teaching Speech

The speech therapist's role in the development and conduct of speech improvement programs in the public schools. Speech materials suitable for use with school-age children according to classroom curriculum needs are reviewed and discussed. Special attention is given to materials used with school-age children who have speech and language problems.

HEALTH PROFESSIONS AND NURSING

CODS 426 Organizing Speech and Hearing Programs The factors important to the organization, administration and supervision of speech and hearing programs in the public schools. The school speech pathologists' interprofessional relationships as they relate to the program are considered.

Prerequisite: CODS 425

CODS 462 Auditory Rehabilitation

Discusses the ramifications of hearing loss as they pertain to both the pediatric and adult populations. Diagnostic techniques, amplification systems and therapy strategies as they relate to both auditory habilitation and rehabilitation are presented. Finally, counseling and educational needs are considered for each population. Prerequisite: CODS 363

Department of Health Science

Professors: S. Hawes, S. Lisbe Associate Professors: A. Hudis, J. Levitan (chairperson) Assistant Professors: R. Blonna, M. Grodner, C. Nnabugwu, D. Watter

The Department of Health Science offers a major program leading to a bachelor of science degree in community health. Certification in school health education is also available for physical education majors. The major in community health is designed to prepare individuals to work with professionals in health and allied health fields and with the community in planning, implementing and evaluating the educational component of community health services. Health educators are employed by local, state, federal and voluntary health agencies, community health centers, hospitals, clinics, health maintenance organizations and private industry.

MAJOR REQUIREMENTS		42 CREDITS
HSC 300	Community Health	3
HSC 310	Health Care Systems	3
HSC 315	Human Disease	3
HSC 361	Research Analysis and Evalua	tion in
	Health	3
HSC 370	Concepts and Issues of Aging	3
HSC 400	Epidemiology	3
HSC 430	Health Counseling	3
HSC 450	Health Administration	· 3
HSC 451	Methods in Health Education	3
HSC 490	Human Sexuality	3
HSC 491	Drugs and Health	. 3
HSC 497	Fieldwork in Community He	alth 8
HSC 498	Seminar in Community Heal	h 1
COREQUISITES 10–11 CREDITS		-11 CREDITS
BIO 170	Basic Microbiology	4
PSY 210	Developmental Psychology	3.
Choose one of the following:		
BIO 302	Human Genetics	3

CODS 463 Stuttering and Other Rhythm Disorders

This course emphasizes the nature, onset and etiology of stuttering and rhythm disorders. Diagnostic procedures for children and adults and treatment approaches are reviewed.

CODS 499 Independent Study As approved and to be arranged. 1–3 credits

CHEM 164	College Chemistry	- 3
ENV 110	Environmental Foundations	4
REQUIRED	GENERAL	
EDUCATION	N COURSES	
BIO 112	General Anatomy and Physiology I	4
BIO 113	General Anatomy and Physiology II	4
HSC 320	Nutrition	3
MATH 130	Elementary Statistics	3

3

COURSES

PSY 110

Unless otherwise noted, all courses are for 3 credits.

General Psychology

HSC 120 Current Health Issues

Health problems affecting college students are selected by the students and discussed on a problem-solving basis. Special emphasis on human sexuality, mental health, stimulants and depressants, environmental health and consumer health.

HSC 200 Consumer Health

Consumer problems viewed in terms of economic, social, psychological and biological consequences. Topics include health insurance, life insurance, medicaid, over-thecounter drugs, cosmetics, health fads and quackery, consumer protection agencies, sales frauds and evaluation of products.

HSC 210 Women's Health

Facts, feelings and practical aspects of women's attitudes toward themselves and their bodies. Topics include women's development, mental health, female sexuality, the menstrual cycle, contraception, abortion, pregnancy and birth, gynecological care and self-help procedures, cancer detection and treatment, menopause, nutrition, aging, rape and self-defense.

HSC 300 Community Health

Organization and function of community health agencies and their relation to the school and community health programs. Includes discussion on chronic and communicable disease, pollution, sanitation programs, accidents, food handling and preservation and consumer health. Includes fieldwork.

HSC 310 Health Care Systems

An overview of our present health care system. Class discussions and reading assignments focus on identifying the changing roles of traditional health service organizations and health professionals and the sociopolitical and technical pressures that lead to these changes. In addition, the more recently developed health service and planning agencies and health professional occupations are identified and discussed in terms of their efforts to restructure the organizations, finance and delivery of health services.

HSC 315 Human Disease

The physical and social determinants of the major diseases affecting U.S. citizens, especially New Jersey residents. Prevention measures and symptomatology, sequellae and appropriate intervention strategies are identified and discussed.

HSC 320 Nutrition

A foundation study of human nutrition emphasizing its relationship to optimum physical and emotional health. Includes basics of sound nutrition requirements of various food elements, diet planning, diet patterns for specific age groups, nutritional fads and weight control.

HSC 321 Nutrition in Early Childhood

Basic nutrition concepts and knowledge related to the particular needs of students in early childhood education. Emphasis on educational application, especially methodology, analysis and development of nutrition programs in schools and other child development programs.

HSC 322 Nutrition for Health Professionals

Introduction to human nutrition that emphasizes the application of basic nutrition information in the community and health delivery system. Includes fundamentals of nutrition science, relationship between nutrition and individual well-being, assessment of nutrition status, nutrition through the life-span, consumer nutrition concerns and therapeutic nutrition.

Prerequisite: Either chemistry, biology, microbiology, nutrition or permission of the instructor

HSC 361 Research Analysis and Evaluation in Health

Basic aspects of research methodology, basic source materials in health and public health. Experiences in critical reading of professional literature. Basic statistical techniques.

Prerequisite: HSC 360

HSC 370 Concepts and Issues of Aging

Changes in certain aspects of health during the middle and later years including changes in anatomy and physiology, in nutritional requirements, in sensorium. Aging and sexuality. Common causes of mortality and morbidity. Attention to psychosocial and economic aspects and to legislation and community organization for satisfying health needs of aging persons.

HSC 400 Epidemiology

Epidemiology of disease: how diseases are spread, prevented and controlled. Introduction to the principles of epidemiologic investigation.

Prerequisites: MATH 130 and HSC 361

HSC 430 Health Counseling

A study of the social, psychological and cultural determinants of health behavior and consideration of their meaning for school or community settings. Conditions and phenomena that affect people's acceptance of health information. Health counseling skills are emphasized.

HSC 450 Health Administration

Focus is on acquiring basic health service administration skills. Classroom discussions and reading assignments introduce the student to modern health care management concepts and techniques that integrate social and quantitative perspectives. Visits to various health service delivery organizations help the student develop a better understanding of the interrelated and interdependent nature of the health care system.

HSC 451 Methods in Health Education

Principles and procedures for planning and evaluating health education experiences. Identification of necessary concepts in the development of health education component of programs and criteria for their inclusion. Also, techniques and skills needed for teaching large and small groups.

HSC 470 Health Aspects of Aging

Basic health needs and concerns of the population. Interpretation of health care systems. Prevention of illness and disease and promotion of good health throughout the lifespan.

HSC 471 Community Health Services and the Aging

An interdisciplinary approach to the analysis of theory and practice of community health resources which offer health and social services to the aging. Examines health and health related programs and establishes relationships between need and services.

HSC 490 Human Sexuality

The biological, sociological, psychological and educational aspects of human sexuality. Anatomy and physiology of reproduction and sexual response. Includes discussion and material dealing with contraception, abortion, homosexuality, deviation and other psychological and sociological aspects of human sexuality.

HSC 491 Drugs and Health

A discussion and analysis of new developments in drug and alcohol abuse, research, education, treatment, legal and social policy. Social conditions that promote use of drugs and alcohol and abuse potentials are examined. Consultants present topics unique to their profession.

HSC 497 Fieldwork in Community Health

This course provides the student with a supervised, fulltime internship in a health sector organization. Students are encouraged to apply their knowledge and to test organizational theory in the working environment. Taken concurrently with HSC 498. Open only to senior community health majors.

8 credits

HSC 498 Seminar in Community Health

This course focuses on the issues and problems confronting health professionals in our contemporary health care system. Discussions concentrate on developing appropriate strategies that lead to the feasible solutions of problems encountered during student internships. Taken concurrently with HSC 497. Open only to senior community health majors.

1 credit

Department of Nursing

Professors: R. Sands, M. Patrick

Associate Professors: C. Barry, S. DeYoung (chairperson), J. Deighan, G. Just, H. D. Maciorowski, C. O'Grady, P. Schnabel

Assistant Professors: C. Barbarito, C. Bareford, K. Connolly, J. Cuddihy, D. D'Amico, I. Foti, K. MacMillan, M. McElgunn, E. Suraci

The Department of Nursing is nationally accredited by the National League for Nursing. Its primary mission is the education of students who will serve as professional nursing practitioners in various health care delivery settings. Offerings of the department include a major in professional nursing, supported by a concentration in the biological, physical and social sciences and a broad base of general education courses. Graduates of this program are awarded a bachelor of science degree with a major in nursing. Upon completion of the program, graduates are eligible to take the National Council Licensure Examination (NCLEX) administered by the New Jersey Board of Nursing to become a registered professional nurse (RN).

Nursing courses include a clinical laboratory component in which faculty guide students in the development and application of knowledge and skills in a variety of health care settings. An on-campus learning center provides a large inventory of audiovisual materials, video cameras, carrel room and hospital equipment and supplies for student laboratory experiences.

Entrance Requirements

In addition to the College's admissions requirements, prospective nursing majors are required to take both a biology and chemistry course, with laboratory in high school.

Students can be admitted to the program as freshmen or as transfers. Transfer students and students changing majors are eligible for admission following application and review by the department. It should be noted that students must have completed BIO 112–113, 170, and PSY 110 and 210 (with grades of C or better) before being permitted to begin the adaptation nursing sequence of courses.

Registered nurse students from diploma and associate degree programs may apply for admission following a transcript evaluation. Course deficiencies must be remedied prior to registering for the beginning courses in the nursing major. For further information, registered nurse HSC 499 Independent Study As approved and to be arranged. 1–3 credits

students should address inquiries to the RN Coordinator, Department of Nursing.

Any student seeking information regarding the recommended sequence of courses in the nursing major should contact the Nursing Department.

Policies

The Nursing Department conducts a performance standards review after each semester. Students who do not maintain a 2.0 grade point average in the major and corequisite courses or who do not achieve a grade of C or better are evaluated for retention/progression in the nursing major.

Nursing laboratory courses are conducted both on and off campus. Automobile transportation is required for most off-campus experiences.

Nursing students are required to have a yearly physical examination and to submit the results to the Nursing Department.

MAJOR COU	RSES	53 CREDITS
NUR 210	Nursing as a Profession	3
NUR 212	Adaptation Nursing I	3
NUR 213	Adaptation Nursing II	3
NUR 214	Adaptation Nursing I Laborate	ory 2
NUR 215	Adaptation Nursing II Laborat	ory 3
NUR 310	Family Systems and Adaptatio	nI 2
NUR 311	Family Systems and Adaptatio	n II 2
NUR 312	Expanding Family and Adapta	ition
	Nursing	3
NUR 313	Established Family and Adapta	ation
	Nursing	3
NUR 314	Expanding Family and Adapta	ition
	Nursing Laboratory	4
NUR 315	Established Family and Adapt	ation
	Nursing Laboratory	4
NUR 410	Community Systems	2
NUR 411	Professional Practice Theory	3
NUR 412	Adaptation in the Community	
NUR 413	Professional Clinical Practice	I 2
NUR 414	Adaptation in the Community	,
	Laboratory	4
NUR 415	Professional Clinical Practice	0
NUR 416	Senior Seminar	1
NUR 450	Nursing Research	3

COREQUISITE COURSES* 39 CREI		DITS
BIO I12	General Anatomy and Physiology I	4
BIO 113	General Anatomy and Physiology II	4
BIO 170	Basic Microbiology	4
BIO 302	Human Genetics	3
BIO 312	Advanced Anatomy and Physiology	4
CHEM 164	College Chemistry	3
CHEM 064	College Chemistry Laboratory	1
CHEM 165	Organic Biochemistry	3
CHEM 065	Organic Biochemistry Laboratory	1
HSC 320	Nutrition	3
MATH 130	Elementary Statistics	3
PSY 110	General Psychology	3
PSY 210	Developmental Psychology	3

*Note: Degree requirements not listed (36 credits) include additional general education courses.

COURSES

Unless otherwise noted, all courses are for 3 credits.

NUR 210 Nursing as a Profession

Identifies historical and evolutionary perspectives in nursing as they impact on current issues and trends in health care delivery and professional nursing.

NUR 212 Adaptation Nursing I

Utilizes the Roy Adaptation Model as a framework for the nursing process which identifies normative ranges and health problems within a holistic model of humans. Prerequisites: BIO 113, 170 and PSY 210

NUR 214 Adaptation Nursing I Laboratory

Building on theory presented in NUR 212 and laboratory content, assessment techniques and basic nursing activities emphasize the one-to-one relationship between student and client with a focus on primary prevention. Prerequisites: BIO 113, 170 and PSY 210 Taken concurrently with NUR 212 2 credits, 6 laboratory hours

NUR 213 Adaptation Nursing II

A further study of the human response to internal and external changes is the focus. Concepts of secondary and tertiary prevention and their application to the healthillness continuum are introduced, along with leadership and group process skills.

Prerequisites: NUR 210, 212 and 214

NUR 215 Adaptation Nursing II Laboratory

Building on class theory from NUR 213, students practice in a clinical setting which provides for care of the client experiencing physical health problems, as well as the opportunity to practice basic group strategies. Prerequisites: NUR 212 and 214 Taken concurrently with NUR 213 3 credits, 9 laboratory hours

NUR 309 Application of Basic Nursing Skills

This elective laboratory course gives the beginning nursing student an opportunity to improve upon fundamental nursing skills. Emphasis is placed on nursing care for the sick adult, with concentration of underlying principles and rationale for all actions. Skill focus includes personal hygiene, nutrition, vital signs, body mechanics, exercise and rest. Practice of skills begins in the Learning Center; supervision in a clinical setting follows.

2 credits, 6 laboratory hours

NUR 310 Family Systems and Adaptation I

Introduces the family as a primary social unit with health needs and goals. Family structure, developmental level and stressors upon family health are identified. Teachinglearning as an integral component in the assessment and care of families is stressed.

Prerequisites: NUR 213, 215, CHEM 165 and 065 Taken concurrently with NUR 312, 314 or NUR 313, 315, HSC 320

2 credits

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NUR 311 Family Systems and Adaptation II

A continuation of the study of the family as a client of the nurse. Specialized stressors which threaten family health status and goal setting for families at risk are emphasized. Prerequisites: NUR 310 and 312, 314 or 313 and 315 Taken concurrently with NUR 312, 314 or NUR 313, 315 2 credits

NUR 312 Expanding Family and Adaptation Nursing

Emphasizes the evolving and growing family members and their adaptation status during growth and developmental cycles in health-illness. Psychosocial stressors of the expanding family are included and physiological adaptation is emphasized.

Prerequisites: NUR 213, 215, CHEM 165 and 065 Taken concurrently with BIO 302

NUR 313 Established Family and Adaptation Nursing

This course studies adaptation by the adult to various stressors/stimuli affecting the attainment of adaptive goals by members of established and maturing family units. Altered physiologic functioning and the associated psychosocial responses provide the focus for the study of adults and their health status.

Prerequisites: NUR 213, 215, CHEM 165 and 065 Taken concurrently with BIO 312

NUR 314 Expanding Family and Adaptation Nursing Laboratory

This laboratory setting provides for application of theory from NUR310 and 312 or NUR311 and 312. Students utilize cognitive and psychomotor skills by implementing the nursing process with female and male parents, the neonate, infants, children and adolescents.

Prerequisites: NUR 213, 215, CHEM 165 and 065 Taken concurrently with NUR 312 and NUR 310 or 311 4 credits, 12 laboratory hours

NUR 315 Established Family and Adaptation Nursing Laboratory

This laboratory applies theory from NUR 310 or 311 and NUR 313. Students utilize cognitive and psychomotor skills in the implementation of the nursing process with adult members of an established family.

Prerequisites: NUR 213, 215, CHEM 165 and 065 Taken concurrently with NUR 313 and NUR 310 or 311 and BIO 312

4 credits, 12 laboratory hours

NUR 410 Community Systems

Focuses on the role of the community as it relates to the health status of individual families. Community behavior and the potential effects of consumerism, as well as the sociopolitical dynamics of health-illness care, are explored.

Prerequisites: BIO 312, NUR 311, 312, 313, 314 and 315 Taken concurrently with NUR 412, 414

2 credits

NUR 411 Professional Practice Theory

Designed to facilitate transition from a student role to that of the beginning professional practitioner. The structure of the course enables the student to examine both the sociocultural and economic forces affecting the nursing profession within the health care delivery system and the resulting political and legal processes.

Prerequisites: NUR 410, 412, 414 and 450

NUR 412 Adaptation in the Community

Focuses on the family and its members as clients of nursing who experience alterations in role function and interdependence in response to severe/sustained threats to their physiologic, psychic and social integrity. Relevant psychosocial theories contributing to ineffective self-concept behaviors and the definition and redefinition of roles are studied.

Prerequisites: BIO 312, NUR 311, 312, 313, 314 and 315 Taken concurrently with NUR 410

NUR 413 Professional Clinical Practice I Laboratory

Offers the student the opportunity to practice the various roles of the professional practitioner. Clinical expertise is developed via the application of the nursing process utilizing three levels of prevention.

Prerequisites: NUR 410, 412 and 414 Taken concurrently with NUR 411

2 credits, 6 laboratory hours

NUR 414 Adaptation in the Community Laboratory Provides the opportunity to apply the Roy Adaptation Model in the nursing care of individuals/families responding to sustained stressors influencing adaptation. Application of theory from NUR 412 is geared to a client population with significant alterations who require assistance to achieve an optimal level of wellness.

Prerequisites: BIO 312, NUR 311, 312, 313, 314 and 315 Taken concurrently with NUR 410, 412 4 credits, 12 laboratory hours

NUR 415 Professional Clinical Practice II Laboratory

Offers the student the opportunity to provide care to groups of patients/clients at selected levels of prevention. The student applies theories of leadership, management, change and teaching-learning in the practice setting. Prerequisites: NUR 410, 412, 414 and 450 Taken concurrently with NUR 411, 413

3 credits, 9 laboratory hours

NUR 416 Senior Seminar

Students examine and present selected current professional issues in nursing.

Spring semester

Prerequisites: NUR 410, 412, 414 and 450 Taken concurrently with NUR 411 1 credit

NUR 434 Critical Care Nursing

An elective course designed to prepare senior students for practice in the complex environment of the critical care unit. The focus is on the care of the critically ill adult. The course includes both formal classroom presentations and supervised clinical experience.

Prerequisites: NUR 410, 412 and 414

3 credits, 9 laboratory hours

NUR 450 Nursing Research

Designed to help the student understand and utilize research concepts and methods by developing the students ability to analyze, criticize and interpret research. Students critique a published research study and conduct group research projects. Fall semester, senior year.

Prerequisites: MATH 130 and completion of 300-level nursing courses

NUR 451 Concepts of Nursing Administration

An elective course designed to assist the professional nurse in utilizing current management theory and strategy to investigate and approach the unique issues and problems in nursing health care management. The focus of the course proceeds from identifying the individual and his/ her personal leadership style, to the group and effective team building to the organization and its strategies for unifying the entire system. Throughout, learners can apply findings to their own nursing leadership experience. Potential conflict areas in health care management are identified as they impact on the nurse manager's role and responsibilities.

Prerequisite: Taken concurrently with NUR 411 or permission of the instructor

NUR 499 Independent Study

An opportunity to pursue areas of nursing interest. As approved and to be arranged.

School of Humanities

School of Humanities

John O'Connor, Dean Office: Matelson Hall 362

The School of Humanities offers bachelor of arts degrees in black studies, English, French, Spanish, history, philosophy and liberal studies, as well as an endorsement program in bilingual/bicultural education.

These majors are designed for students interested either in pursuing a specific professional career, such as law, teaching or administration, or in developing a solid foundation to support future vocational choices. Many nonmajors broaden their thinking, reading and writing skills by taking upper-level electives in these areas.

The school also offers a series of interdisciplinary honors courses that combine broad cultural seminars with intensive individual study and lead to an honors in humanities degree designation.

Finally, the school serves the campus and the community throughout the year with an array of on-campus conferences and off-campus projects, such as the Great Falls Festival and the production of films on topics of humanistic interest.

Honors Program in Humanities

Taught by different members of the school, under the direction of a single director, the honors courses in humanities are designed to challenge the superior student's capacities through structured multidisciplinary seminars and intensive individual study. The courses general aims are: (1) to promote intellectual excellence within a common scholarly community, (2) to foster an awareness of various disciplines and their unity, (3) to offer opportunities for self-direction of future goals.

The humanities honor program is taken in addition to the student's major and is usually started in the freshman or sophomore year. A 3.0 minimum GPA is required for admission; special coordinators are available for advisement and supervision.

HONORS CO	DURSES	15 CREDITS
HUMH 199	Humanities Honors Seminar I:	
	Representations of Humanity F	ast
	and Present	3
HUMH 200	Humanities Honors Seminar II	:
	Representations of Humanity F	ast
	and Present	3
HUMH 498	Humanities Honors Research:	
	Independent Study	3 .
HUMH 499	Humanities Honors Thesis:	
	Independent Study	3
Plus one of th	ne following:	
HUMH 300	Humanities Honors Colloquium	n: The
	Twentieth Century and Its	
	Discontents	3
HUMH 301	Humanities Honors Colloquiur	n: The
	Enlightenment: Origins of Mod	lern
	Consciousness	· '3

HUMH 302	Humanities Honors Colloquium:	
	Medieval and Renaissance Culture	3
HUMH 303	Humanities Honors Colloquium:	
	Classical Tradition and Christian	
	Civilization	3

Humanities Honors Evening Program

Evening sections of the honors program have been created in order to better meet the interests and needs of working students. The practical experience and problems of such students are taken as the starting point for developing a comprehensive view of life in the twentieth century and examining the role of the humanities in responding to its problems. A larger historical perspective is then developed in order to appreciate more fully the possibilities and limits of our human nature.

HONORS COURSES 15 CR		DITS
HUMH 201	Humanities Honors Seminar III:	
	Representations of Humanities in the	
	World of Work Today	3
HUMH 202	Humanities Honors Seminar IV:	
	Representations of Humanities	
	Through Historical Perspectives	3
HUMH 498	Humanities Honors Research:	
	Independent Study	3
HUMH 499	Humanities Honors Thesis:	
	Independent Study	3
Plus one of t	he following:	
HUMH 300	Humanities Honors Colloquium: The	
	Twentieth Century and Its	
	Discontents	3
HUMH 301	Humanities Honors Colloquium: The	
	Enlightenment: Origins of Modern	
	Consciousness	3
HUMH 302	Humanities Honors Colloquium:	
	Medieval and Renaissance Culture	3
HUMH 303	Humanities Honors Colloquium:	
	Classical Tradition and Christian	
	Civilization	3

COURSES

Unless otherwise noted, all courses are for 3 credits.

HUMH 199 Humanities Honors Seminar I: Representations of Humanity Past and Present

Selected humanistic problems in the literature, history and philosophy of the past and present. Semester is divided into two periods, classical and medieval-Renaissance, with emphasis on representative authors, e.g., Plato, Sophocles, Chaucer. Readings, seminar discussions, guest lecturers and educational films explore such perennial questions as the interplay of self and society, the value of intelligence, humankinds place in nature, heroism, etc. Prerequisite: Program admission

HUMH 200 Humanities Honors Seminar II: Representations of Humanity Past and Present

Selected humanistic problems in the literature, history and philosophy of the past and present. Semester is divided into two periods—the age of revolutions and the twentieth century—with emphasis on representative authors, e.g., Shakespeare, Cervantes, Wordsworth, T.S. Eliot. Readings, seminar discussions, guest lecturers and educational films explore such perennial questions as the interplay of self and society, the value of intelligence, humankind's place in nature, heroism, etc.

HUMH 201 Humanities Honors Seminar III: Representations of Humanities in the World of Work Today

An examination of human life and its problems in the twentieth century, specifically designed to interest the evening working student. Our technological culture has promised unlimited control and prosperity, but has also brought alienation and complexity. Possible solutions offered by politics, behavioral science and philosophy are discussed. This course develops a perspective for understanding our human context and provides a focus for dealing with its problems.

HUMH 202 Humanities Honors Seminar IV: Representations of Humanities Through Historical Perspectives

An examination of classic expressions of human nature and values from the ancient Greeks through the twentieth century, specifically designed to interest the working evening student. There is an emphasis on such issues as the hero as an expression of cultural values, the educational role of the epic and other literary forms and the various means people have found to achieve self-discovery and salvation.

HUMH 300 Humanities Honors Colloquium: The Twentieth Century and Its Discontents

An interdisciplinary examination of some specific contemporary cultural issue—the loss of self in modern life, myth-making impact of technology, etc. Each semester focuses on a different facet of modern consciousness, including such aspects as creative experience, scientific outlook and existentialism.

HUMH 301 Humanities Honors Colloquium: The Enlightenment: Origins of Modern Consciousness

An examination of the contributions of the Enlightenment to the development of modern Western consciousness. The course explores the role of reason and sentiment in the development of European cultures of the eighteenth century.

HUMH 302 Humanities Honors Colloquium: Medieval and Renaissance Culture

An examination of the thought, literature, art and social structure of the Middle Ages and the Renaissance, c. 400–1500. The course stresses the features distinctive to the period and those which have influenced the modern world.

HUMH 303 Humanities Honors Colloquium: Classical Tradition and Christian Civilization

A study of the philosophical, anthropological and social concepts of the Greeks and Romans and their impact on Christian culture. Emphasis on comparing individual thought and expression and social organization within our modern world.

HUMH 498 Humanities Honors Research: Independent Study

Independent study and research in an approved subject for the honors program.

HUMH 499 Humanities Honors Thesis: Independent Study

Independent study with the completion of a written report or its equivalent approved in the honors program. Prerequisite: HUMH 498

Humanities Interdisciplinary Courses

Two sections of a broad interdisciplinary approach to the humanities have been created to meet the general education needs of students. These courses have been approved for general education for all students in the College.

COURSES

Unless otherwise noted, all courses are for 3 credits.

HUM 251 Humanities I: Cultural Roots and Continuities

A study of the roots of Western and non-Western cultural expression in the context of historical periods or by thematic approach. Analysis of ideas and values from the classical world to the Renaissance.

HUM 252 Humanities II: Cultural Roots and Continuities

A study of the roots of Western and non-Western cultural expression in the context of historical periods or by thematic approach. Analysis of ideas and values from the Renaissance to the modern world.

Liberal Studies Major

Students who are interested in several disciplines offered by the School of Humanities, but who do not wish to major in any one of them, may want to pursue the liberal studies major offered by the school. With the assistance of a special academic advisor, students select a total of 48 credits from at least three of the school's majors, taking no more than 18 credits in any one of them.

Successful completion of the program results in a bachelor's degree in liberal studies: School of Humanities.

Department of African and African-American Studies

Professor: V. McClean (interim chairperson) Assistant Professor: L. Agard-Jones

The African and African-American Studies Department offers both a major and a minor program, plus a variety of ethnic courses as free electives for students in other major programs. The African and African-American studies major may be combined with various certification sequences to provide the student teaching certification in early childhood, elementary education or social studies.

The objectives of the major in African and African-American studies are: (1) to introduce the history and culture of African and African-American peoples; (2) to provide extensive training in these areas for students interested in research, teaching, social work and community leadership; (3) to provide students a background for graduate work in African and African-American studies; (4) to provide students a background for careers in urban study and community work; (5) to provide a foundation for graduate studies.

MAJOR REQ Required Co AAAS 100	UIREMENTS 36 CR purse 3 c Introduction to African and African- American Studies	EDITS credits
	tional credits chosen from among the f	ollow-
ing areas as	indicated:	
Historical	90	redits
Three course	es required:	
AAAS 201	African History	3
AAAS 240	African-Caribbean History	3
AAAS 241	African-American History to 1865	3 3
AAAS 242	African-American History Since 1865	3
AAAS 310	Recent Interpretations in African-	
	American Studies	3
AAAS 315	African-American Background for	
	Teachers	3
Sociopsycho	ological 6 d	redits
Two courses	required:	
AAAS 113	The Black Family	3
AAAS 131	African-American Social Thought	3
AAAS 150	Racism and Sexism in a Changing	
	America	3
AAAS 155	Perspectives on Justice and Racism:	
	The African-American Experience	3
AAAS 202	African Family Life	3
AAAS 230	Roots of Racism in the United States	3
AAAS 255	The Black Woman Experience	3 3
AAAS 258	Black Psychology	
AAAS 260	The Black Church	3

Political		6 credits
Two courses	required:	
AAAS 205	Pan-Africanism and the Black	
	Experience	3
AAAS 208	Blacks and the Criminal Justice	
	System in the United States	3
AAAS 238	African Politics	3
AAAS 244	Black Politics	3
Humanities	and the Fine Arts	6 credits
Two courses	required:	
AAAS 101	African-American and African-	
	Caribbean Dance	3
AAAS 120	African-American Music	3
AAAS 206	Elementary Swahili	3
AAAS 207	Blacks and the Mass Media	3
AAAS 213	African-American Theatre	3
AAAS 228	The African-American Literary	
	Experience I	3
AAAS 229	The African-American Literary	
•	Experience II	3
AAAS 233	Introduction to the Art of Africa	a 3
AAAS 307	Intermediate Swahili	3
AAAS 311	African Literature	3
Economics a	and Community Development	6 credits
Two courses	required:	
AAAS 220	Career Guidance	3
AAAS 280	Minority Enterprises	3
AAAS 299	Student Community Service	3
MINOR REC	UIREMENTS 1	8 CREDITS
AAAS 100	Introduction to African and Afri	
·	American Studies	3

American Studies 3 Plus 3 credits from each of the above concentrations, by advisement.

COURSES

Unless otherwise noted, all courses are for 3 credits.

AAAS 100 Introduction to African and African-American Studies

An introductory course which familiarizes the student with the diasporic and interdisciplinary nature of the black presence in the world. The student surveys concepts such as negritude, Ujamaa, black capitalism, black survival, etc.

AAAS 101 African-American and African-Caribbean Dance (same as PEEL 212)

Preparation of the body through conditioning exercises and dance sequences to perform ethnic dance forms from Africa, the Caribbean and the United States. Examination of African, French and Spanish sources. Students may choose a field trip to a professional performance or examine dance forms more closely by composing a dance sequence using ethnic materials from class.

AAAS 113 The Black Family

A sociocultural and historical introduction to the various forces that have continuously eroded the social fabric and stability of the black family. It offers theoretical exposition of the nature and features of the black family with comparative concepts and practices of love, marriage, divorce, illegitimacy, homosexuality and other aspects of the black family.

AAAS 120 African-American Music

The music of Africa and black people in the United States has become interwoven with that of America. This course presents a brief analysis of such musical forms as black spirituals, jazz and the utilization of such African forms of expression as drums, guitar, bass fiddle and other means of musical expression. Interpretive analysis is also presented.

AAAS 131 African-American Social Thought

The development of the social thought of black Americans in the nineteenth century regarding the nature of being and the circumstances and fortunes of black people. Begins with David Walker and Martin Delaney and concludes with Malcolm X, Stokely Carmichael and Bayard Rustin.

AAAS 150 Racism and Sexism in a Changing America

A study of the historical, philosophical, social and political treatments and interpretations of blacks and women in the United States. Selected topics include media stereotypes of blacks and women, definitions and rationalizations of racism and sexism, the role that blacks and women have played in U.S. history, the relationship between the nine-teenth-century abolitionist movement and the early feminist movement, the relationship between the 1960s civil rights movement and the women's liberation movement.

AAAS 155 Perspectives on Justice and Racism: The African-American Experience

An examination of the concepts of race, racism and ethnicity and the psychosocial causes and effects of bias and prejudice in general and in the African-American experience in particular. Seminal findings of leading social scientists are reviewed. Through a study of the slave trade movement in the eighteenth and nineteenth centuries, the civil rights movement of the 1960s, the struggle of American minority groups for improved social status and a survey of selected African-American literature and music, students learn how racism and all manifestations of social injustice hinder and undermine the welfare of both the oppressed and the oppressor. Several viable solutions to racism and social injustice are proposed.

AAAS 201 African History

Egypt, Kush, Ghana, Mali, Songhai, Benin and Ife are among the civilizations of ancient Africa discussed. Particular stress on the controversy surrounding the African origin of all civilizations. Describes the exploration, conquest and colonization of Africa during the nineteenth and twentieth centuries. Also highlights the beginning of the transformation of the African traditional society to a modern society.

AAAS 202 African Family Life

Traces and examines the origin and development of the African family system, marriage, sex and child rearing. Focuses also on the primacy of the family in African life.

AAAS 205 Pan-Africanism and the Black Experience An analysis of the philosophy and philosophers of Pan-Africanism and the African experience in the diaspora; emphasis is on those forces that identify, unite and disunite black people all over the world as they strive to control their destiny.

AAAS 206 Elementary Swahili

Presents the fundamentals of Kiswahili. Simple grammatical construction and forms, building of broad and commonly used vocabulary and idiomatic expressions, developing reading, writing and conversational skills with emphasis on the grammatical principles and their application to the language.

AAAS 207 Blacks and the Mass Media

Examines the history and roles of blacks in the American media.

AAAS 208 Blacks and the Criminal Justice System in the United States

Analyzes the presence of racism in the formulation and implementation of the law, in the courts, penal institutions and in the police department. An effort is also made to examine the relevance of social, economic and political factors in the administration of justice.

AAAS 213 African-American Theatre

An exploration of the black experience through the medium of theatre.

AAAS 220 Career Guidance

Designed to enable students to move more easily into the workplace. Students are exposed to various aspects of the job market and learn interview techniques, résumé preparation and other methods of self-preparation and presentation.

AAAS 228 The African-American Literary Experience I

The black experience as depicted in literature by and about black people. Focuses on biographies, autobiographies and fiction.

AAAS 229 The African-American Literary Experience II

Focuses mainly on African-American drama, poetry and essays.

AAAS 230 Roots of Racism in the United States A survey which traces and analyzes the development of

A survey which faces and analyzes the development of American racism.

AAAS 233 Introduction to the Art of Africa

An introductory course designed to explore and examine the origin, evolvement and meaning of African art. In addition to highlighting the forms, styles and expressions of African art, the course examines the role of art in African life.

AAAS 238 African Politics

Deals with postindependence governmental political parties and ideological inclinations among African states. Emphasis is on the origin and evolvement of political institutions and their functions within the framework of contemporary Africa and the world in general.

AAAS 240 African-Caribbean History

Examines the history of the Caribbean starting with the discovery of the islands, colonization, slavery and the evolution of a distinctly African-Caribbean personality and culture.

AAAS 241 African-American History to 1865

After a survey of the African heritage, including slavery, a study is made of the history of people of African descent in their New World environment. The role of African-Americans in the development of the United States to the Civil War is examined.

AAAS 242 African-American History Since 1865

Beginning with an examination of the period of Reconstruction, the course explores the various survival tactics of African-Americans and the effects of governmental and societal action or inaction on their lives up to the present.

AAAS 244 African-American Politics

An examination and analysis of the political power structure and relationships in the black community. Emphasis is on those factors which make black communities relatively powerless and how this state of powerlessness can be ameliorated. Particular attention is paid to black political interaction in New Jersey.

AAAS 255 The Black Woman Experience

Examines what it is to be a black woman in racist and sexist America. Highlights the achievements of black women and the predicament of being caught up between the black man and the white man.

AAAS 258 Black Psychology

Examines traditional schools of psychology as they pertain to the psychological experience of black Americans. Alternative psychological considerations relative to the black experience and advanced by noted black psychologists are also explored.

AAAS 260 The Black Church

Examines and analyzes the social and historical development of the black church in the black community. The course demonstrates the role of the church in the survival and struggles of black people. There is also an attempt to show how the church's role has been adjusted to changing circumstances and environment.

AAAS 280 Minority Enterprises

The structure, patterns and problems of minority owned and/or operated enterprises in the black and other minority communities. Emphasis on ways and means by which black and other minority owned and operated businesses can be improved both quantitatively and qualitatively.

AAAS 299 Student Community Service

The student has the opportunity to coordinate the learning experience through performance in different areas which encompasses aspects of practicum, education as a profession, student teaching, early childhood, secondary education and so forth. The course involves working with organized groups of inner-city children in the areas of remedial teaching, basic skill development, recreational and cultural enrichment. May be repeated once for credit.

AAAS 307 Intermediate Swahili

Emphasizes primarily conversation and basic grammar. The class meets formally twice a week; in addition, students work with tapes in the language lab. The approach is concentrated on phonology, morphology and vocabulary.

AAAS 310 Recent Interpretations in African-American Studies

A presentation of the differing points of view on current topics in African-American studies and scholarship.

AAAS 311 African Literature

Examines contemporary African writing, essays, drama, poetry and/or fiction. Explores the common theme in most African writing and the problems of cultural identification.

AAAS 315 African American Backgrounds for Teachers

A general course for prospective teachers. Introduces various current and historical precepts for analysis which enable the student to identify the roots of the black American experience. Students visit areas of cultural interest to African-Americans in the metropolitan New York/New Jersey area.

AAAS 412 Fundamentals of Social Work

Prepares the student who plans to pursue graduate study in social work. Emphasis is on the basics of social work and how these basics relate to the social problems of inner-city areas.

AAAS 420 Economic Structure of the Black Community

Beginning with an introduction to economics, the course then defines the ghetto or the inner city and examines the economic relations between the ghetto and the rest of the economy.

AAAS 480 Research Methods and Minorities

Introduces students to methodological approaches in research in minority communities.

AAAS 499 Independent Study As approved and to be arranged.

1–3 credits

Department of English

Professors: R. Atnally, P. Cioffari, E. DeGroot, D. Duclos (chairperson), R. Jaarsma, R. Kloss, F. Manno, A. Mazzella, V. Mollenkott, S. Wertheim

Associate Professors: D. Edwards, S. Hand, J. Hauser, J. Jordan, S. McNamara, D. Perry, S. Radner, R. Rosen

Assistant Professors: A. Deakins, C. Edinger, C. Farrington, S. Hahn, L. Hamalian, J. Hartman, C. Nekola

The English Department offers a major program in literature and a major with a concentration in writing leading to a bachelor of arts degree in English, plus a minor in English and a variety of liberal studies or free elective courses for students in other programs. Students may choose from courses in English, American and comparative literature; linguistics, criticism and writing; or contemporary themes in literature and film.

The objectives of the program are: (1) to provide students an understanding and appreciation of literature as art and the relation of literature to other art forms; (2) to heighten students' awareness of their linguistic, literary and cultural heritage; (3) to develop their critical reading, interpreting and thinking skills; (4) to increase their ability to communicate their ideas in writing; (5) to provide students backgrounds for their careers; (6) to prepare students for advanced work at the graduate level.

Students majoring in English often choose careers in teaching, law, journalism, publishing, editing, public relations, advertising, computer technology, finance, or writing film and TV scripts, plays, novels, stories or poems.

English majors who intend to pursue a graduate program in English are strongly encouraged to satisfy the intermediate reading level in a foreign language.

Note: It is recommended, although not required, that ENG 110, Writing Effective Prose, which all students must pass with a grade of C, be taken by English majors during the first semester of the freshman year, and that ENG 200, Methods of Critical Analysis, which is not a required course, be taken in the second semester.

Students are strongly urged to take ENG 200, Methods of Critical Analysis, prior to other major courses and after completing ENG 110, Writing Effective Prose.

ENGLISH MAJOR: LITERATURE

CONCENTRATION REQUIREMENTS	33 CREDITS
Survey Courses	12 credits

Select four of the following courses, with at least one in each of the British, American and Western European offerings:

ENG 301	English Literature Through the	
	Neoclassical Period	3
ENG 302	English Literature: Romantic through	
	Modern	3
ENG 303	American Literature to 1865	3
ENG 304	American Literature 1865–1914	3
ENG 305	Literature of Western Europe: To the	
	Renaissance	3
ENG 306	Literature of Western Europe:	
	Renaissance Through Modern	3

	•	
Period Cours	es	6 credits
Choose two, one of which must be before 1900:		
BEFORE 1900		
ENG 310	Elizabethan and Jacobean Drama	3
ENG 311	Literature of the English Renaissa	
ENG 312	Donne, Jonson and Their	
	Contemporaries	3
ENG 313	The Age of Dryden, Pope and Sw	ift 3
ENG 314	The Age of Johnson	3
ENG 315	Romantic Movement in England	3
ENG 316	Literature and Culture of the	
	Victorians	3
ENG 320	The English Novel: Defoe to Aust	
ENG 321	The English Novel: Dickens to Ha	•
ENG 322	Nineteenth-Century European No	ovel 3
AFTER 1900		
ENG 211	Modern Drama	3
ENG 317	Modern American Literature	3
ENG 318	Modern British Literature	3
ENG 319	Modern British and American Po	etry 3
ENG 323	Twentieth-Century European Nov	
ENG 340	Contemporary Literature	3
Writing Cour	se	3 credits
Choose one:		
ENG 330	Critical Writing	3
ENG 331	Creative Writing	3
COMM 250	Journalism	3
Language Con	urse	3 credits
Choose one:		
ENG 401	Linguistics and Grammar	3
ENG 402	Development of the English	
	Language	3
Specialized A	uthor or Seminar Course	3 credits
Choose one:		
ENG 410	Chaucer and His Age	3
ENG 411	Shakespeare: Comedies and	
	Histories	3
ENG 412	Shakespeare: Tragedies and	_

Romances 3 ENG 413 Milton 3 3 ENG 480 Seminar in English Literature ENG 481 Seminar in American Literature 3 Electives 6 credits

Select two additional English courses at or above the 200level

WRITING CONCENTRATION REQUIREMENTS

REQUIREMEN	N13	55 CIUDITS
Core Courses		24 credits
ENG 200	Methods of Critical Analysis	3
ENG 330	Critical Writing	3
ENG 331	Creative Writing	3
ENG 401	Linguistics and Grammar	3
or		
ENG 402	Development of the English La	nguage 3
Any two surve	ey courses from the list below:	
ENG 301	English Literature Through th	e
	Neoclassical Period	· 3
ENG 302	English Literature: Romantic	
	Through Modern	3

33 CREDITS

ENG 303	American Literature to 1865	3
ENG 304	American Literature 1865–1914	3
ENG 305	Literature of Western Europe: To	o the
	Renaissance	3
ENG 306	Literature of Western Europe:	
	Renaissance Through Modern	3
ENG 317	Modern American Literature	3
ENG 318	Modern British Literature	3
Any two lite	rature courses at or above	
the 200-leve	el	6
Advanced W	Vriting Courses	9 credits
GROUP I (6	5–9 credits):	
ENG 209	Book and Magazine Editing	3
ENC 200	The sheet and Wistoiner	2

ENG 300	Technical Writing	- 3
ENG 332	Advanced Creative Writing	3
ENG 333	Critical Writing II	3
ENG 617	Modern Techniques of Composition*	3
ENG 619	Writing for the Magazine Market*	3

*These are graduate courses, open to undergraduates with the permission of the chairperson and dean. See the graduate catalog for course descriptions.

GROUP II (0–3 credits):

THEA 454	Playwriting	3
COMM 431	Screenwriting	3
COMM 324	Writing for Radio or T.V.	3
COMM 451	Freelance Writing	3
COMM 250	Journalism	3

MINOR REQUIREMENTS I8 CREDITS

Three survey courses from American, English		
and World literature courses		
One period course	3	
ENG 210 Methods of Critical Analysis	3	
or		
One course in writing	3	
Elective	3	
Note: With the chairperson's permission, 6 credits of other		

English courses may be substituted for two of the required courses in the minor.

CERTIFICATION REQUIREMENTS 27 CREDITS Students who wish to seek teaching certification should register with the appropriate education advisors and should consider taking more than the minimal requirements in literature courses. (See Department of Curriculum and Instruction.)

COURSES

Unless otherwise noted, all courses are for 3 credits.

ENG 101 English as a Second Language: Fundamentals I

An intensive course in basic English communication skills (listening, speaking, reading, writing) designed for the nonnative English-speaking student. Course covers the sound system and the written structure of the English language.

ENG 120 English as a Second Language: Fundamentals II

An intensive course in English communication skills (listening, speaking, reading, writing) designed for the nonnative English-speaking student. The course presupposes a knowledge of English above' and beyond the merely "survival" level and covers the sound system and the written structure of the English language.

ENG 108 Basic Writing

The basic writing course is designed to emphasize the standard English sentence and the extension of a group of sentences into an organized unit.

Note: Credits for this basic skills course are not applicable toward degree requirements.

ENG 110 Writing Effective Prose

Essential freshman writing course designed to develop student's writing competency on the college level.

ENG 120 Twentieth-Century Authors

Major works in modern fiction, drama and poetry May include Conrad, Joyce, Woolf, Yeats, Lessing, Faulkner, Hemingway, Fitzgerald, Eliot, Albee, Baraka, Camus, Hesse, Chekhov, Pirandello, Lorca, Kafka, Brecht.

ENG 130 The Short Story

Analysis of selected short stories by a variety of writers who have shaped and are shaping the genre: Bradbury, Hemingway, Baraka, Updike, Singer, Borges, Baldwin, Barthelme, Joyce, Kafka, Cheever, O'Connor, Oates, Poe, Hawthorne, Faulkner, James, Wright, Welty and others.

ENG 150 Introduction to Literature

The course is intended to develop the student's appreciation and enjoyment of selected works in fiction, drama and poetry. Works selected represent different historical periods and cultures. Writing is required.

ENG 200 Methods of Critical Analysis

An in-depth study of selected short stories, poems and plays with focus on practice in using precise literary terms and analytical and evaluative techniques.

ENG 201–202 English as a Second Language: Introduction to American Culture Through Literature I and II

Advanced course in written communication based on American literary works and designed for the foreign student or the student whose primary or familiar language is not standard American English.

3 credits each semester

ENG 207 Effective Business Writing

A skills course featuring technical report writing, letters, data sheets, abstracts and other communication procedures.

ENG 208 The Bible and Literature

Examines the literary stature and influence of the Bible and the way authors utilize what they have read to strengthen their own creative efforts. Works by Dickinson, Twain, Nemerov, Louise Bogan, Margaret Walker, T. S. Eliot, Poe and others.

ENG 209 Book and Magazine Editing

A skills course in the basic techniques of editing books and magazines. Designed for those interested in a publishing career and for the general reader and writer.

ENG 210 Modern Biography

Biographies and autobiographies: Van Gogh, Fitzgerald, Richard Wright, others; a study of the writer's purpose, procedure and style.

ENG 211 Modern Drama

Dramatists of Europe, England, America: Ibsen, Strindberg, Shaw, Pirandello, Lorca, O'Neill, Albee, Chekhov.

ENG 214 Contemporary Drama

Theatre of the absurd, cruelty, protest, guerilla theatre; experiments in ritual and free drama such as "Dionysius in 69." Playwrights may include Adamov, Beckett, Genet, Ionesco, Frisch, Pinter, Albee, Baraka, Stoppard, Kopit, Van Itallie, Sartre, Bond, Handke.

ENG 215 Literature into Opera

How composers and librettists transformed *Carmen, Macbetb, Salome, Camille, Manon Lescaut* and other works into operas. Ability to read music not required.

ENG 216 Science Fiction and Fantasy

A study of classical and recent science fiction, fantasy for adults and children, utopian and antiutopian fiction. Authors read may include Asimov, Bradbury, Burgess, Carroll, Clarke, Gilman, Heinlein, Huxley, LeGuin, Lewis, Orwell, Tolkien, Vonnegut, Wells, Zamyatin.

ENG 217 Images of Women in Modern Literature

A study of the images of women in modern literature drawn mainly by women and emphasizing the different social and emotional roles women are forced to play: young unmarried women, wives, mother, old maids, free women. Selected writers include Plath, McCarthy, Lessing.

ENG 219 Nineteenth-Century Women's Voices

A study of literary pieces of the nineteenth century showing a woman passively accepting her role in society, questioning her role, rebelling against her role and creating a new life style. Writers include Mary Shelley, Harriet Beecher Stowe, Charlotte Bronte.

ENG 220 Women, the Bible and Modern Literature

A study of Western religion's influence on sexual roles, including the Liberationist reaction. Designed to raise consciousness on a philosophical, mythological and political level. Includes works by Millett, Rich, Daly, Lessing, others.

ENG 221 The Mystery Story

An historical, philosophical, cultural and literary study of the mystery story through an examination of such fictional works as the detective story, the suspense novel, the story of strange or frightening adventure, the tale of espionage, the tale of crime and the Gothic novel—with an emphasis on detection.

ENG 222 Crime and Punishment: Law in Literature An examination of a wide range of literature with particular emphasis on its relation to questions and problems of civil and criminal law; may include works by Thoreau, Dickens, Camus, Dostoevsky, Wright, Solzhenitsyn and others.

ENG 229 Novel and Film

Consideration of major novel-film adaptations, with emphasis on the challenge of transforming words into images; included may be *The Great Gatsby* (Fitzgerald-Clayton), *Great Expectations* (Dickens-Lean), *Jules and Jim* (Roche-Truffaut), others.

ENG 230 Story and Film

Study of short works: short story, myth, fable and their film adaptations; works may include *The Sentinel/2001: A Space Odyssey* (Clark-Kubrick). *Blow-up* (Cortazar-Antonioni), *The Turn of the Screw/The Innocents* (James-Clayton) and experimental short films like *Crazy Quilt*.

ENG 300 Technical Writing

Designed to help students identify and reproduce the qualities that mark successful technical writing. The course concentrates on composing several short papers—definition, description, classification and process analysis—and on the long technical report.

ENG 301 English Literature Through the Neoclassical Period

Critical study of selected prose and poetry from the beginnings of English literature through the eighteenth century, with attention to social and intellectual background; included are such authors/works as *Beowulf*, Chaucer, Spencer, Shakespeare, Milton, Pope, Johnson, Fielding, Swift.

ENG 302 English Literature: Romantic Through Modern

Critical study of selected prose and poetry from the early nineteenth century to the present, with attention to social and intellectual background; included are such authors as Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, Tennyson, Browning, Arnold, Wilde, Joyce, Yeats.

ENG 303 American Literature to 1865

Major and minor American authors from the beginnings through Poe, Hawthorne, Melville, Emerson, Thoreau.

ENG 304 American Literature 1865–1914 Major and minor American authors of the period; emphasis on Whitman, Dickinson, Twain, James, Stephen Crane.

ENG 305 Literature of Western Europe: To the Renaissance

Great works of the early Western world: Homer, Sophocles, Plato, Aristotle, Virgil, Dante, Boccaccio, St. Augustine.

ENG 306 Literature of Western Europe: Renaissance Through Modern

Great works of the later Western world: Machiavelli, Rabelais, Cervantes, Moliere, Goethe, Balzac, Dostoevsky, Mann, Sartre, Proust.

ENG 310 Elizabethan and Jacobean Drama

Shakespeare's forerunners and contemporaries in drama: Kyd, Marlowe, Jonson, Webster, others.

ENG 311 Literature of the English Renaissance

A study of selected English prose and poetry of the sixteenth century. Special attention is given to the early English humanist theories of education, eloquence and language and their literary influence. The important developments in English poetry are studied, including the variation of line, language, imagery and form (song, sonnet, satire, pastoral, epic). Several writers are considered, but the focus is on such major figures as Thomas More, Philip Sidney and Edmund Spenser.

ENG 312 Donne, Jonson and Their Contemporaries

Study of British literature, 1600–1660, emphasizing Donne, Jonson, Bacon, Herrick, Herbert, Marvell. Focus is on relationship between themes and techniques of seventeenth-century literature and those of modern times.

ENG 313 The Age of Dryden, Pope and Swift

A study of selected prose and poetry and minor authors of the age of Dryden, Pope and Swift to explore the relationship of the literature to the intellectual milieu of the period: social, political and economic thought; the theory and practice of letters; the dominant attitudes in philosophy, religion, science and education.

ENG 314 The Age of Johnson

Late eighteenth-century poetry, prose drama; emphasis on Boswell, Johnson, Goldsmith, Gray; decline of Augustanism, rise of Romanticism.

ENG 315 Romantic Movement in England

Romantic poetry and prose; Burns, Blake, Wordsworth, Coleridge, Scott, Byron, Shelley, Keats; critics of the period.

ENG 316 Literature and Culture of the Victorians

Poetry of Tennyson, Browning, Arnold, others; prose works by Carlyle, Newman, Mill, Ruskin, Huxley; Victorian novels and plays.

ENG 317 Modern American Literature

Leading American writers of the modern period: Stevens, Frost, Eliot, O'Neill, Fitzgerald, Hemingway, Wolfe, Steinbeck, Faulkner, others.

ENG 318 Modern British Literature

Fiction, poetry, drama, criticism since 1885: Forster, Hardy, Joyce, Yeats, Shaw, Woolf, Conrad, Hopkins, Lawrence, I. A. Richards, Empson; Irish Renaissance, naturalism, symbolism.

ENG 319 Modern British and American Poetry Major poets and significant trends in modern British and American poetry beginning with Yeats and Robinson and including such figures as Frost, Eliot, Auden, Thomas, Sexton, Plath, Ginsberg, Lowell, Larkin and Hughes.

ENG 320 The English Novel: Defoe to Austen Selected novels by Defoe, Richardson, Fielding, Smollett, Sterne, Austen.

ENG 321 The English Novel: Dickens to Hardy Selected novels by Dickens, Thackeray, Trollope, Meredith, George Eliot, Hardy. ENG 322 The Nineteenth-Century European Novel A study of major French, German and Russian novels against the social, political and intellectual milieu of nineteenth-century Europe. Within the framework of the romantic realistic and the naturalistic literary movement, the novels are read from a variety of viewpoints: as a depiction of the life of a nation (Balzac, Gogol, Tolstoy and Mann), as a probing of the psychological nature of man (Stendhal, Dostoyevsky and Zola), as an innovation in technique (Flaubert, Stendahl and Mann).

ENG 323 Twentieth-Century European Fiction

Readings in representative novelists, including Proust, Mann, Hesse, Kafka, Camus, Moravia, Solzhenitsyn

ENG 330 Critical Writing I

Analysis of writings to uncover principles and techniques of expressive communication; training in writing critical papers, book and film reviews, formal and informal essays.

ENG 331 Creative Writing

Workshop leading to the development of imaginative power and originality in writing poetry, fiction, drama, film scripts.

ENG 332 Advanced Creative Writing

An advanced writing course designed to meet the needs of students who, having successfully completed one semester of creative writing, desire further time for supervised writing and specialized instruction.

Prerequisite: ENG 331

ENG 333 Critical Writing II

Seminar introduces the student to an area of specialization in writing in an advanced context which provides close individual supervision and also exposes the student to all kinds of analytical writing. The technical reporter, for example, learns from the film critic; the journalist, from the copywriter.

Prerequisite: ENG 330

ENG 335 Modern American-Jewish Authors

Study and interpretation of modern literary works describing the Jewish experience in America. Authors include Philip Roth, Bernard Malamud, Edward L. Wallant, Chaim Potok, Saul Bellow, Delmore Schwartz, others.

ENG 340 Contemporary Literature

British, American and continental fiction and poetry from World War II to the present, writers may include Barth, Barthelme, Pynchon.

ENG 401 Linguistics and Grammar

Study of both traditional and structural grammars to aid in analysis of language in understanding and improving style.

ENG 402 Development of the English Language

Study of forces that shaped vocabulary, pronunciation, spelling and grammar.

ENG 410 Chaucer and His Age

Emphasis is on Chaucer's *Canterbury Tales* and Chaucer's language, late Middle English of the South East Midlands. Some attention is given to the historical background of the period and, if time permits, a number of Chaucer's shorter works are read and discussed.

ENG 411 Shakespeare: Comedies and Histories

Study of such plays as Richard II, Henry IV, A Midsummer Night's Dream, The Merchant of Venice and Much Ado About Nothing.

ENG 412 Shakespeare: Tragedies and Romances Study of such plays as Hamlet, Macbeth, Romeo and Juliet, Othello, King Lear, The Tempest.

ENG 413 Milton

Study of dramas, lyric poems, epics and prose works of John Milton with emphasis on Comus, Lycidas, Paradise Lost, Aeropagitica; focus is on Milton's relevance for our time.

ENG 420 Literary Criticism

Major literary theories and practices from Aristotle to the present with emphasis on contemporary application. Experience in practical analysis and writing is featured.

ENG 421 Literature and Psychoanalysis

Study of literature through application of depth psychology; analysis of short works such as Oedipus Rex and the short stories of Poe, Kafka, Melville and Hawthorne.

ENG 422 The Psychological Novel

The relationship between depth psychology and literature and the use of psychoanalysis in interpreting and understanding the novel. Authors may include Gide, Woolf, Joyce, Beckett and others.

Myth, Symbol and Literature ENG 423

Study of symbol, ritual and myth formation and primitive, classical, biblical and social symbols and myths as they appear and function in literature.

ENG 480 Seminar in English Literature

Designed to help students study, in depth, a single British author or work chosen by the instructor.

ENG 481 Seminar in American Literature

Course to help students study, in depth, a single American author or work chosen by the instructor.

ENG 490 Internship in English

On-the-job training with regional employers. Students write regularly for the employer and the academic coordinator

ENG 499 Independent Study

As approved and to be arranged. 1-3 credits

Department of History

Professors: J. Brandes, J. Drabble, M. Edelstein, C. Gruber (chairperson), T. Ripmaster

Associate Professors: I. Nack, G. Satra

Assistant Professors: T. Cook, J. Livingston, S. Nalle, J. Pluss, I Tirado

Emeritus: V. Caporale, L. Ellis, D. Li, R. Miller

The history major may concentrate in American or European history. Courses in Asian, Latin American and Middle Eastern history also are offered. The courses examine economic, social, intellectual, political and diplomatic history and aim at developing the techniques of historical investigation, as well as increasing a student's ability to critically interpret the past.

MAJOR REQUIREMENTS 33 CREDITS Area Requirements HIST 205 United States History Through Reconstruction **HIST 206** United States History Since Reconstruction Plus two European history electives and one 3credit course in non-Western history, e.g., Asian, Middle Eastern or Latin American history. The courses may be at the 200-, 300- or 400-level and are credited towards elective requirements. **Elective Requirements** 27 credits One course of completely free electives at the 200-, 300- or 400-level Six courses at the 300-level Two courses at the 400-level

Note: Of the 33 credits required for the major, no more than 18 can be taken in United States, European or non-Western history. The 6 credits of European and 3 credits of non-Western history electives in the Area Requirements are credited toward the 27 credits of the Elective Requirements by level.

CERTIFICATION REQUIREMENTS 27 CREDITS Students who are interested in obtaining teaching cer-

tification in history must complete additional courses as prescribed by the School of Education (see Department of Curriculum and Instruction).

COURSES

3

3

3

3

18

6

Unless otherwise noted, all courses are for 3 credits.

European History

HIST 101 Western Civilization to 1648

The first of a two-semester sequence, this course covers the historical development of Western civilization to 1648. The subjects include ancient Greece and Rome, the Judeo-Christian tradition, the Middle Ages, the Renaissance and the Reformation. Emphasis is placed on broad cultural history and the formation of the Western cultural heritage.

HIST 102 Western Civilization Since 1648

The second of a two-semester sequence, this course is designed to provide broad coverage of the shaping of modern Western civilization. It traces political, intellectual, social and economic trends from 1648 to the present. Prerequisite: HIST 101

HIST 231 Greek Civilization

Covers the cultural background of ancient Greece and the rise and fall of Athenian democracy. Thucydides and other commentators are used for a critical study of the great issues of Greek civilization.

HIST 232 Rome: Republic and Empire

A survey of critical issues and developments in Roman history from the founding of the city in the eighth century B.C. to the fall of the Empire in the fifth century A.D. Particular attention is placed on the historical effects of social and political growth and decline. Topics include both political-constitutional history and the development of social institutions such as the family and marriage.

HIST 233 Europe in the Middle Ages

The early Middle Ages and the emergence of medieval order, fact and theories of the relations between church and state, Europe in the High Middle Ages, the development of secular and urban society, formation of nation states, the artistic and intellectual culture of castle, cathedral and university.

HIST 241 History of Christianity

A history of Christianity from the ancient world to the present, primarily in its European setting. Focus is on the reciprocal impact of the forms, thought and organization of the Christian religion and society and culture.

HIST 301 Social History of Modern Europe

Covers the evolution of European society from a preindustrial society in the eighteenth century through an industrial society in the nineteenth and twentieth centuries, to a postindustrial society in the late twentieth century and introduces students to the objectives, methodology and sources of social history.

HIST 302 Origins of Civilization

A survey of the world's oldest civilizations, including ancient Egypt, Mesopotamia, the Hebrews and the ancient Near East in general. The course examines how and why civilizations originated and developed in the ancient Near East. Focus includes art and archaeology as well as political, social and religious history.

HIST 305 Italy from Renaissance to Nation-State 1300–1871

A survey of Italian history from the Middle Ages to the present. Topics include the city-state, the Renaissance, the early modern era, the Risorgimento and modern Italy. The course emphasizes the growth of the Italian nation as well as diverse regions of Italy.

Prerequisite: HIST 101

HIST 307 Imperial Spain 1450-1700

How did a country of nine million discover, conquer and colonize two continents, dominate Europe for 150 years and create one of the world's major cultures? This course surveys the political and cultural history of Spain and her empire from 1450–1700.

Prerequisite: HIST 101

HIST 309 The Italian Renaissance

This course concentrates on the cultural, political and social foundations of the Renaissance in Italy between 1350 and 1550. Because of the Italian Renaissance's profound influence on all of Europe, some attention is paid to tracing the spread of Renaissance ideas to other countries. Prerequisite: HIST 101

HIST 310 Modern France Since 1815

The development of France, one of the first democratic republics, from the Bourbon Restoration in 1814 through the Fifth Republic today, featuring a multifaceted approach to French history. Emphasis is on continuity versus change and stability versus instability. The course explores the reasons for France's decline and later resurgence as a European power.

HIST 312 Reformation Europe

Martin Luther's challenge to the Catholic Church in 1517 led to one hundred and fifty years of religious reformations and wars in Europe and Christian evangelization around the world. This course examines the origins of the reformation movement and assesses its impact on European society and politics during the early modern period. Prerequisite: HIST 101

HIST 330 Imperial Russia

Examines society, politics and culture of Imperial Russia from the reign of Peter the Great to the last Romanovs. Major topics include serfdom, intellectual currents and nineteenth-century revolutionary movements.

HIST 331 Twentieth-Century Russia

After an inquiry into the causes and effects of the revolutions of 1905 and 1917, a study is made of the Soviet regime under Lenin, Stalin, Malenkov, Khrushchev, Brezhnev and Kosygin. Attention is given to internal industrial, agricultural, social, political and cultural development as well as to the role of the Soviet Union in world affairs.

HIST 332 Tudor-Stuart England

Explores the England of Henry VII to Queen Elizabeth, the social and political opposition to the early Stuarts, the English Civil War, the regime of Oliver Cromwell, the Restoration, the Glorious Revolution and the growth of political stability after 1689.

HIST 333 Modern Britain

Surveys key political developments in Great Britain since the 1780s. Main emphasis is on the development of those social, economic, religious and educational developments which produced modern British society.

HIST 336 Europe in the Age of Revolution: 1789–1848

Examines the transformation of Europe between 1789 and 1848 in terms of what has been called the "dual revolution"—the French Revolution of 1789 and the contemporaneous industrial revolution in Britain. Special emphasis is placed on the revolutionary movement from 1789 to 1848 which gives this period a certain unity.

HIST 337 Triumphant Materialism: Europe 1848–1914

European history from the close of the revolutionary era of 1848 to the outbreak of the First World War. Major emphasis is on liberalism and nationalism, imperialism and world politics, the late phases of the industrial revolution, cultural developments and the coming of the war.

HIST 338 Europe Since 1914

Major political, economic, social and intellectual developments in Europe since 1914. The internal and diplomatic history of the Great Powers, the economic and political transformation of Europe under the impact of an American-Soviet rivalry and the intellectual record of the age are discussed.

HIST 339 Russian Revolutionary Tradition

Examines a century of revolution (1825–1925), focusing on the social, political and intellectual characteristics of such groups as the Decembrists, Nihlists, Populists, Marxists and Anarchists.

HIST 340 Germany from Bismarck Through Hitler

Covers Germany's history from 1848 to 1945 with an emphasis on Germany's involvement in the wars from the Franco-Prussian War to World War II.

HIST 341 Hitler and the Nazi Era

This course deals with the era of twentieth-century Fascism and World War II, with an emphasis on Hitler and Nazi Germany.

Pretequisite: HIST 102

HIST 343 England in the Age of the American Revolution

A social and political history of England, 1740–1820. Explores the impact of three revolutions—the industrial, the American and the French—on the older institutions of the realm. Students examine the industrial revolution, analyze the varied responses of the political leaders, the new radicals and the Irish patriots to the American and French Revolutions and reflect on how this age produced a new economy, a new society and a new form of politics.

HIST 429 The Russian Revolution 1917–32

This course examines the causes and impact of the revolutions of 1917, the major political parties and figures and the social dynamics within the revolutionary movement. The course then focuses on the first 15 years of Soviet power, delving into the type of society created, the conflicts within the leadership and the rise of Stalin.

HIST 430 The French Revolution and the Napoleonic Era

Examines crucial periods such as the revolution of 1789, the Year II—the revolutionary dictatorship and the Terror—and the Napoleonic era. While political history is stressed, great emphasis is placed on social history.

HIST 432 Intellectual History of Ancient and Medieval Civilizations

An examination of the artistic, practical (ethical and political), theoretical and religious thought of ancient and medieval civilization in the West.

United States History

HIST 205 United States History Through Reconstruction

The first semester of an introduction to American history, from the time of the European conquest of the Americas to the reconstruction of the nation after the Civil War. Recent approaches and techniques—social history, women's history, Afro-American history, working class history—are incorporated to permit new perspectives on the nation's past.

HIST 206 United States History Since Reconstruction

The second half of the introduction to U.S. history, this course spans the years from Reconstruction to the present. It aims to cast new light on familiar questions about the American experience in the late nineteenth and twentieth centuries—the transformation of America under the impact of immigration, urbanization, industrialization, movements of social protest and reform and the exercise of power on a global scale—through using the latest tools of historical interpretation.

HIST 210 Labor History Through Film

An examination of labor history from the nineteenth century to the present, particularly in the United States, through the study of films depicting the conditions and struggles of working people, accompanied by collateral readings and discussions. The films range from animated cartoons to slides, documentaries and feature-length masterpieces, such as *How Green Was My Valley, Sacco and Vanzetti* and *The Grapes of Wrath*.

HIST 220 Origins of the Nation to 1789

Begins with the European discovery of America. Traces the planting of the English colonies in America, the growth of conflict between colonies and the mother country and the establishment of an independent national government.

HIST 228 History of New Jersey

An examination in historical perspective of political, economic and social institutions of New Jersey and the influence of adjacent areas.

HIST 239 U.S. Jewish Community

Focusing on the historic development of the American-Jewish community from colonial to recent times, this course examines such vital issues in American society as ethnicity, cultural identity and intergroup relations.

HIST 250 American Women's History

The experience of American women from colonial times to the present. Explores conditions that shaped women's destiny, analyzes the differences between the historical experience of women from different social classes and ethnic groups and considers the ways American women have perceived their condition and worked to alter it.

HIST 320 Jeffersonian and Jacksonian Democracy 1789–1840

An inquiry into the origins of Jeffersonian and Jacksonian Democracy is followed by a consideration of their immediate impact and lasting significance. Economic, social and political aspects are studied and comparisons made with developments in other nations.

HIST 321 Era of the Civil War 1840–77

An investigation of the causes and effects of the beginnings of modern industry and the expansion of slavery, a study of the abolitionist movement, the sectional conflict, the Civil War and Reconstruction with emphasis on their longrange impact on the white and black peoples of the United States.

HIST 322 Progress, War and Normalcy 1877–1933 A survey of rapid economic growth with its impact on business, labor and agriculture, followed by discussion of social and political developments, including urbanization and progressivism. Attention is focused on the rise of overseas imperialism, the First World War and the League of Nations, concluding with an examination of the booming twenties and the Great Depression.

HIST 323 From New Deal to Cold War: Since 1933

An in-depth examination of the Great Depression of the 1930s with an appraisal of New Deal domestic and foreign policies, followed by a study of World War II and the United States' role in world affairs through the postwar decades. Changing political, social and economic issues confronting the postwar generation are assessed against the background of world developments.

HIST 325 Immigration in the Growth of America

Exploring John F. Kennedy's theme of "A Nation of Immigrants," the course focuses on the mass migrations which shaped American development into the twentieth century. The causes of immigration, the economic and cultural adjustment of the newcomers and their impact are studied in the light of historical evidence.

HIST 327 America as a World Power

Traces development in United States foreign policy from emergence as a world power at the opening of the twentieth century to its position of world dominance after the Second World War. The ideological underpinnings of American strategy and tactics on the world stage, U.S. role in major twentieth-century wars—hot and cold—and the perils of nuclear weapons and the arms race are stressed.

HIST 328 Economic History of the United States (Also listed as ECON 328)

The course emphasizes economic elements, including the use of human and natural resources, in the historic growth of the United States from colonial to recent times. An analysis is made of such evolutionary economic institutions as the business corporation and labor unions, as well as the changing role of government, technological innovations, competition versus combination, agrarian and industrial pioneering and other issues in the development of the American economy.

HIST 403 Interpreting U.S. History

Primarily for students with a special interest in American history. Provides an opportunity to critically examine areas in which important reinterpretations have been made or in which controversy exists among scholars.

Asian History

HIST 370 Traditional China

China before the Western impact. Analyzes China's religions, philosophies, government, economics, family and society and attempts to bring into focus those aspects of Chinese civilization that have a direct bearing on our understanding of the Chinese today.

HIST 371 Modern China

China's response to the impact of the West with particular attention to the difficulties with which China adjusts itself to a modern, fast-changing world and the developments which led to communism.

Latin American History

HIST 380 Colonial Latin America

A review of the Ibero-Indian-African background of Latin America. Also deals with the discovery and conquest of the area; Spain's and Portugal's imperial policies; political, economic and social developments of the colonial society and the wars for independence.

HIST 381 Modern Latin America

Such topics as problems of early nationhood, caudillismo versus modern dictatorships and quest for democracy, difficulties in moving from a colonial to a national economy and the social tension of a society in transition are explored with consideration given to Latin America's role in world affairs and relationships with the United States.

HIST 382 Puerto Rico, Cuba and the Caribbean World

A survey of Caribbean history from Columbus to Castro, stressing the important changes which occurred in the 1950s when the Caribbean became a focal point of the struggle between different world interests and ideologies.

Variable Courses: Thematic, Cross-Cultural History, Methodology

HIST 225 Cultural History of the 1960s

Examines the history of the 1960s—a decade of change, reflection and dissent—from the cultural perspectives of literature, music and social and political thought.

HIST 260 Historiography

The development of historical writing, the understanding of history, the historical method, the practice and theory of historiography. Intended for history majors.

HIST 400 Internship in History

This course is offered to qualified history majors to provide on-the-job training as interns at one of the following museums or institutions: Botto House Museum, New Jersey Historical Society, Passaic County Historical Society located in Lambert Castle, etc. Internships offer training in museum work, archival work and as tour guides.

Prerequisites: 15 credits in history and a GPA in history of 3.0

HIST 433 Comparative Revolutions

A comparative study of revolution as a historical phenomenon. An analysis of various theoretical models of revolutionary change provides the conceptual tools with which to compare revolutions in different historical and cultural settings. Major attention is focused on an intensive analysis of selected major revolutions. Prerequisites: HIST 101 and 102

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HIST 480 Seminar

Topics chosen and announced by faculty Readings, reports and papers related to specific topics. 1–3 credits

HIST 499 Independent Study

As approved and to be arranged.

Department of Languages and Cultures

Professors: C. Barry, O. Saa, O. de la Suarée Associate Professors: A. Aguirre, D. Chao, G. Nussenbaum, A. Sully

Assistant Professors: M. Barasch (chairperson), W. Rosa Instructors: N. Bailey, M. Napoliello, K. Yoon

The aims of the Department of Languages and Cultures are fourfold: (1) to further the development of students majoring or minoring in the department (currently, majors and minors are offered in French and Spanish); (2) to provide training in bilingual/bicultural education as well as in English as a second language, leading to endorsement as a teacher in those fields in the state of New Jersey and elsewhere; (3) to provide courses which may be used in partial fulfillment of the general education requirement in the humanities; and (4) to offer, whenever possible, electives in second languages.

Career opportunities stemming from a language major or an endorsement in bilingual/bicultural education or in teaching English as a second language may be found in business or in human service careers where bilingualism is valued. Career opportunities may also be found in research, editing, translation, technical writing, airline positions, the UN and others. Teaching opportunities for language majors are to be found in colleges and secondary schools, in FLES (Foreign Language Elementary School) programs, and in bilingual/bicultural and teaching English as a second language programs.

The Foreign Language Requirement

I. Placement William Paterson College has a 0 to 6 credit college-wide foreign language reading requirement which all students must satisfy before graduation. The College does not automatically accept high school foreign language work as equivalent to college-level study. Upon admission, all incoming freshmen and transfer students are screened for high school foreign language experience by an analysis of their high school transcripts. The students are placed in a college-level course commensurate with their high school performance, based on the number of years of study and the grade(s) achieved. The students begin study of a language in college at the level at which they are placed.

Students with very limited or no background in a language whatsoever are placed in a Basic I section and choose among one of the following languages currently offered in the department: Chinese, French, German, Hebrew, Italian, Latin, Russian or Spanish. Students with previous background in a language are placed in a Basic II section. If students decide to take a language they have never had before, they enroll in a Basic I course with the approval of the department's foreign language placement coordinator. Once enrolled in a Basic I section, students have to take a Basic II section in the **same language**. Upon passing a Basic II section, students have completed the requirements for basic language study. Likewise, those students who are placed above a Basic II section (such as Intermediate I or Intermediate II) have satisfied the college-wide foreign language requirement. They can further their study of a particular language and culture by taking Intermediate I and Intermediate II, which are accepted general education courses, or they can use those credits to take any upper-level general education course(s).

II. Exemption The Department of Languages and Cultures also offers students the opportunity of "challenging" their foreign language placement. When students are informed of their placement, they are offered the opportunity to take an Exemption Exam. This test is graded for two levels of proficiency: (1) proficiency at a first-semester level (comparable to completing Basic I), and (2) proficiency at a second-semester level (comparable to completing Basic II). If students pass the Basic I level of proficiency, then they are exempted from taking 3 credits of the required 6 maximum in foreign language. If students pass the Basic II level of proficiency, then they are exempted from taking all 6 of the required credits in foreign language.

Students may wish to obtain credit instead of an exemption for their demonstration of proficiency in which case they apply for a **Challenge Exam**. The same test is used in both cases. The only difference is that students must pay the fee for a challenge exam if they desire to obtain credit. The student must decide **before** taking the exam(s) whether it will be for credit or for an exemption and whether or not to pay the fee. The test is graded for two levels of proficiency (Basic I or Basic II) and credits are awarded for demonstrating this level of proficiency (3 credits for one semester level and 6 for two semesters). No student has to take the exemption exam or the challenge exam nor will the performance in it affect his/her placement. These examinations are offered four times during the year in October, February, June and August.

For further information, students should contact their advisors or the foreign language placement coordinator in the Department of Languages and Cultures.

Junior Year Abroad Program

Students interested in the Junior Year Abroad program should make an appointment with their major advisor who will give them the information they need about eligibility, procedures to be followed, types of programs approved by the College, credit transfers, etc. Semester programs are also available.

French

PREREQUISITES

Required for entrance to the French major is a minimum of 580 in the CEEB placement examination. Advanced placement may be obtained by scores of 600 or above.

Students with little or no French background who wish to major in French should complete FR 110, 111 and 112.

MAJOR REQ	UIREMENTS	30 CREDITS
FR 113	Intermediate French II	3
FR 222	Advanced French Conversation	on and
	Composition I	3
or		
FR 223	Advanced French Conversation	on and
	Composition II	3
FR 230	Masterpieces of French Litera	iture
	from Rabelais to Robbe-Grill	et 3
FR 240	Cultural Heritage of France	3
or		
FR 241	Contemporary French Cultur	e and
	Problems	3
FR 331	The Twentieth-Century Frence	h Novel 3

Note: Other French literature courses at or above the 200level may be substituted for some of the above courses by advisement. Courses in French literature in translation may not be applied to major requirements.

Additional C	ourses	15 credits
FR 219	Commercial French	3
FR 220	Translating I	3
FR 320	Interpreting French Literature	3
FR 333	The Modern French Theatre	3 3 3
FR 334	French Literature to 1600	3
FR 336	Great French Poetry from Villor	n to
	Our Times	3
FR 337	French Literature of Canada, the	5
	Antilles and Africa	3
FR 350	Advanced French Phonetics and	1
	Grammar	3
FR 351	Tutorial Laboratory in French	3 3 3
FR 399	Selected Topics	3
FR 432	The Nineteenth-Century French	1
	Novel	3
FR 435	Seventeenth-Century French Tra	agedy
,	and Comedy	3
FR 438	Literature of the French	
	Enlightenment	3
FR 480	Senior Seminar	3
FR 499	Independent Study	3
MINOR REQ	UIREMENTS 1	8 CREDITS
FR 113	Intermediate French II	3
FR 222	Advanced French Conversation	and
	Composition I	3
or		
FR 223	Advanced French Conversation	and
	Composition II	3
FR 230	Masterpieces of French Literatu	re 3
FR 240	Cultural Heritage of France	3
or		
FR 241	Contemporary French Culture a	and
	Problems	3

Additional Courses6 creditsOne course must be a literature course:FR 219Commercial French3

FR 219	Commercial French	3
FR 220	Translating I	3
FR 320	Interpreting French Literature	3
FR 331	The Twentieth-Century French Novel	3
FR 333	The Modern French Theatre	3
FR 334	French Literature to 1600	3
FR 336	Great French Poetry from Villon to	
	Our Times	3
FR 337	French Literature of Canada, the	
	Antilles and Africa	3
FR 350	Advanced French Phonetics and	
	Grammar	3
FR 399	Selected Topics	3
FR 432	The Nineteenth-Century French	
	Novel	3
FR 435	Seventeenth-Century French Tragedy	
	and Comedy	3
FR 438	Literature of the French	
	Enlightenment	3
FR 480	Senior Seminar	3
FR 499	Independent Study	3

Note: Courses in French literature in translation may not be applied to minor requirements.

CERTIFICATION REQUIREMENTS 30 CREDITS Students interested in obtaining teaching certification in

French mu	ist complete the fo	llowing:	
FR 350	Advanced Fren	ch Phonetics and	
	Grammar		3
The 27-credit series listed under the Department of Cur-			

riculum and Instruction.

COURSES

Unless otherwise noted, all courses are for 3 credits.

FR 109 Introduction to French Culture and Language

Designed primarily to introduce the student to the culture of France across the ages. Cultural material is presented in English. The students ability to understand basic and simplified French and speak at a threshold level is stressed.

FR 110 Basic French I*

Using oral modern French, this course provides the student basic fluency in contemporary everyday French conversation. Reading and writing skills are developed locally from an aural-oral base.

Prerequisite: No high school French

FR 111 Basic French II*

Provides the student ongoing development of contemporary conversational French and reading and writing skills beyond beginning level. Prerequisite: FR 110 or equivalent

FR 112 Intermediate French I*

Aural-oral presentation of such topics as travel, student life and problems, careers, sports and games, industry and the fine arts. Develops reading and writing skills beyond basic level.

Prerequisite: FR 111 or equivalent

FR 113 Intermediate French II*

A continuation and intensification of Intermediate French I. The goal is a sophisticated level of comprehension and discussion. Guided readings of French short stories and newspaper and magazine articles or a novel. Prerequisite: FR 112 or equivalent

FR 118 French for Students in the Natural Sciences

Through readings dealing with current scientific topics and selections from contemporary writings of French experts in various scientific and technological fields, students develop skill in reading current French scientific journals and publications independently. Includes a review of the relevant essentials of French grammar and practice in translating scientific texts into English. Prerequisite: Intermediate-level proficiency

FR 219 Commercial French

Training in understanding and drafting French commercial correspondence (letters and telex) and practice in oral communication in everyday secretarial situations. The course also familiarizes secretaries with those aspects of contemporary French civilization which are useful in daily work.

Prerequisite: Intermediate-level proficiency

FR 220 French: Translating I

An introductory course in the art and practice of translating from English into French and from French into English.

Prerequisite: Intermediate-level proficiency

FR 222 Advanced French Conversation and Composition I

Intensive oral and written practice in French on an advanced level. Practice in colloquial, idiomatic French and the supplementary use of newspapers, magazines and other media.

Prerequisite: Intermediate-level proficiency

FR 223 Advanced French Conversation and Composition II

Continuation and intensification of FR 222. Extensive incorporation of contemporary French cultural material in conversation and intensive practice in composition. Prerequisite: FR 222 or equivalent

FR 230 Masterpieces of French Literature

An introduction to the major literary trends and schools in France from the Renaissance to the *nouveau roman*. Selected readings from masters of each major literary period.

FR 240 Cultural Heritage of France

An introduction to the cultural heritage of France from medieval times through the nineteenth century, including France's major contributions to Western thought and the arts and sciences.

Prerequisite: FR 222 or equivalent

May be taken simultaneously with FR 222

FR 241 Contemporary French Culture and Problems

Contemporary France, its thought, its life style, its contributions to contemporary Western culture. Examination and discussion of the major social and political problems of contemporary France. The impact and contribution of French films today.

Prerequisite: FR 222 or equivalent

May be taken simultaneously with FR 222

FR 300 Twentieth-Century French Literature in Translation

This one-term course enables students, through reading and critical discussion, to confront the ideas and tendencies reflected in the works of the major French writers of the twentieth century. The confusion, diversity, violence and hopes which are keynotes of the contemporary period are dramatically portrayed in the various literary selections offered.

FR 320 Interpreting French Literature

A theoretical presentation of the French method of stylistic analysis known as *explication de texte* and the application of this method to selected texts from various periods of French literature.

Prerequisite: FR 222 or equivalent

FR 331 The Twentieth-Century French Novel

A study of the novel of twentieth-century France, with particular attention to such authors as Gide, Proust, Mauriac, Sartre, Camus, Robbe-Grillet. Prerequisite: FR 230 or equivalent

FR 333 The Modern French Theatre

Major dramatists and movements in France from the beginning of the century to the present. Emphasis on French existentialism through the theatre of the absurd. Prerequisite: FR 230 or equivalent

FR 334 French Literature to 1600

A study of the literature of medieval France. Prerequisite: FR 230 or equivalent

FR 336 Great French Poetry from Villon to Our Times

A study of the French poetic tradition and major poetic works from the medieval period to postsurrealism. Prerequisite: FR 230 or equivalent

FR 337 French Literature of Canada, the Antilles and Africa

Introduces students to the major genres, themes and authors of Francophone literature outside of metropolitan France. Emphasis is on the intrinsic literary value of black and Canadian literature expressed in French and the cultural and social dimensions of these literatures. Prerequisite: FR 230 or equivalent

Advanced French Phonetics and FR 350 Grammar

The French phonetic system, phonetic analysis and transcription, extensive practice in pronunciation, intonation and diction. Practice in simple discourse and the oral reading of prose, poetry and dramatic literature. A systematic study of French grammar at an advanced level. Prerequisite: FR 113 or equivalent

FR 351 Tutorial Laboratory in French

Designed to provide experience, training and academic preparation for majors or minors who seek increased fluency and grammatical expertise. To be applied in Basic I level of French classes.

Prerequisite: At least second-year status in the major

FR 399 Selected Topics

Enrichment courses of special interest to French majors or minors. Chosen through faculty and student discussion. Prerequisite: FR 230 or equivalent

The Nineteenth-Century French Novel FR 432

The French novel from Hugo to Zola. Analysis of the genre in the movements of romanticism, realism and naturalism. Readings from Hugo, Stendhal, Balzac, Flaubert, Zola and Maupassant.

Prerequisite: One 300-level course in French literature

FR 435 Seventeenth-Century French Tragedy and Comedy

The French classical tragedy, tragi-comedy and comedy. The major plays of Corneille, Racine and Moliere in their contemporary and universal significance. Prerequisite: FR 230 or equivalent

FR 438 Literature of the French Enlightenment

The transition from French classicism to the eighteenthcentury revolt against authority and tradition. Selections from Montesquieu, Diderot, Voltaire, Beaumarchais. Introduction to the eighteenth-century French novel and psychological drama.

FR 480 Senior Seminar

In-depth study of a selected author or theme; e.g., women in French literature.

Prerequisite: At least 21 credits completed in the major

FR 499 Independent Study

As approved and to be arranged. 1-3 credits

Spanish

PREREQUISITES

Required for entrance to the Spanish major are three or four years of high school Spanish, or a minimum of 580 in CEEB, or a near native fluency. Advanced placement may Be obtained by standard examination or by decision of the Spanish Studies Committee.

MAJOR REQ	UIREMENTS 30 CRED	ITS	
SPAN 113	Intermediate Spanish II	3	
SPAN 221	Spanish: The Spoken Language	3	
SPAN 222	Spanish Conversation and		
	Composition	3	
SPAN 230	Introduction to Spanish Literature I:		
	То 1700	3	
or			
SPAN 231	Introduction to Spanish Literature II:	2	
	From 1700	3	
SPAN 225	Hispanic Culture I: Spain	3	
OF	Hispania Cultura II. Spanish America	3	
SPAN 226	Hispanic Culture II: Spanish America	-	
Plus one cou	urse from each of the following five grou	ıps:	
Golden Age			
SPAN 331	The Golden Age of Spain	3	
SPAN 435	Cervantes and His Age	3	
SPAN 481	Spanish Seminar	3	
Nineteenth-	and Twentieth-Century Literature		
SPAN 334	Romanticism in Spain: Prose and		
0.12.001	Poetry	3	
SPAN 432	Nineteenth-Century Literature of		
	Spain	3	
SPAN 434	Spanish Literature of the Twentieth		
	Century	3	
Spanish Am	erican Literature to 1900		
SPAN 335	The Literature of Spanish America to		
01111 ()))	Modernism	3	
SPAN 433	The Novel of Spanish America	3	
SPAN 436	The Modern Spanish American Essay	3	
-			
-	erican Literature: Modern		
SPAN 431	The Modern Literature of Spanish America: 1888 to the Present	3	
SPAN 433	The Novel of Spanish America		
SPAN 499	Seminar: Spanish America	3 3	
•	-		
Spanish Dra		2	
SPAN 332	The Drama of the Golden Age	3	
SPAN 337	The Romantic Theatre in Spain	5	
MINOR DEC	QUIREMENTS 18 CREI	אדג	
SPAN 221	Spanish: The Spoken Language	3	
or	opumon. The oponen bungenge	5	
SPAN 222	Spanish Conversation and		
	Composition	3	
SPAN 230	Introduction to Spanish Literature I	3	
or			
SPAN 231	Introduction to Spanish Literature II	3	
SPAN 225	Hispanic Culture I: Spain	3	
or			
SPAN 226	Hispanic Culture II: Spanish America	3	
Plus one co	ourse from each of the following three gro	oups:	
Golden Age			
SPAN 331	The Golden Age of Spain	3	
SPAN 435	Cervantes and His Age	3	
SPAN 481	Spanish Seminar	3	
	-	-	
SPAN 335	nerican Literature to 1900 The Literature of Spanish America to		
31M1 333	Modernism	3	
SDANI /22	The Novel of Spanish America	2	

The Novel of Spanish America

The Modern Spanish American Essay

3 3

SPAN 433

SPAN 436

SPANISH

Spanish Drama

SPAN 332	The Drama of the Golden Age	3
SPAN 337	The Romantic Theatre in Spain	3

CERTIFICATION REQUIREMENTS

Students interested in obtaining teaching certification in Spanish must complete the 27-credit series listed under the Department of Curriculum and Instruction.

COURSES

Unless otherwise noted, all courses are for 3 credits.

SPAN 109 Introduction to Spanish Culture and Language

An introductory course in the language and culture of Hispanic peoples. The basics of Spanish pronunciation and vocabulary, fundamental forms and rudiments of sentence structure. Cultural topics relevant to college students are discussed in English.

SPAN 110 Basic Spanish I*

Introduces the student to the basic elements of the Spanish. language as used in contemporary Spanish conversation and in everyday situations. The student is also exposed to basic forms of the written language and carefully graded readings aimed at widening the working vocabulary.

Prerequisite: No high school Spanish

SPAN 111 Basic Spanish II*

Aims at increasing the student's ability to use basic forms of oral communication in Spanish through constant use of the everyday idiom. Carefully graded practice in reading and writing supplements the conversational aspects of the course.

Prerequisite: SPAN 110 or equivalent

SPAN 112 Intermediate Spanish I*

A thorough review of basic conversation followed by an aural-oral presentation of such topics as travel, student life, careers, sports, fine arts, industry, politics, etc. A review of the essentials of Spanish, development of a larger vocabulary, including idioms, discussion of selected short stories and other selected areas of interest to students are included.

Prerequisite: SPAN 111 or equivalent

SPAN 113 Intermediate Spanish II*

A continuation and intensification of intermediate Spanish I. Guided discussion on a more sophisticated level. A variety of modern selections, prose and poetry, from the many Spanish-speaking countries such as Puerto Rico, Mexico, Cuba, Columbia, Argentina, etc., are integrated into the course.

Prerequisite: SPAN 112 or equivalent

SPAN 114 Contemporary Spanish for Native Speakers

A study of the oral and grammatical structure in today's standard Spanish. Intensive practice in oral and written composition. For native speakers only.

Prerequisite: Written permission of departmental Spanish advisor

SPAN 115 Intermediate Spanish II* (for international management honors

students)

Through oral discussion of relevant readings, the student achieves a more sophisticated level of conversation. Emphasis on political, economic and business issues in Spanish America today.

Prerequisite: SPAN 112 or equivalent

SPAN 118 Spoken Spanish for Tourists

Develops the student's ability to speak, understand and read basic and simplified Spanish.

SPAN 120-121 Intensive Spanish I and II

A concentrated course in first- and second-year Spanish designed to develop the student's ability to read, write, understand and speak everyday Spanish. Covers the basics of vocabulary, pronunciation and sentence structure. Readings and discussions enable the student to acquire the tools needed to master conversational skills. 6 credits

SPAN 198–199 Intensive Course in Conversational Spanish I and II

Designed to further develop the student's ability to understand, read, write and speak modern Spanish. Reviews the basics of vocabulary, pronunciation and sentence structure and teaches the student a more sophisticated level of conversation.

3 credits each

SPAN 200 Introduction to Spanish Culture and Literature

An introduction to the cultural and literary heritage of Spain and Spanish America from medieval times to the present.

SPAN 221 Spanish: The Spoken Language

A guided introduction to the basic problems of the Spanish language based on structural and descriptive analysis of the Spanish sound system. Throughout the course emphasis is placed on the spoken language.

Prerequisite: Intermediate-level proficiency

SPAN 222 Spanish Conversation and Composition Oral and written communication with practical application of content and theory in speaking and oral reading situations. Analysis of various writings to discover principles and techniques to be applied by students in their own writing.

Prerequisite: Intermediate-level proficiency

SPAN 225 Hispanic Culture I: Spain

Synthesis of the cultural characteristics of Spain as expressed through the centuries in literature, art, philosophy and social institutions.

Prerequisite: Intermediate-level proficiency

SPAN 226 Hispanic Culture II: Spanish America

Synthesis of cultural characteristics of Spanish America as expressed through the centuries in literature, art, philosophy and social institutions.

Prerequisite: Intermediate-level proficiency

SPAN 230 Introduction to Spanish Literature I: To 1700

Survey of Spanish literature from its beginnings to 1700. Prerequisite: Intermediate-level proficiency

SPAN 231 Introduction to Spanish Literature II: From 1700

A survey of Spanish literature from 1700 to the present. Prerequisite: Intermediate-level proficiency

SPAN 243 Translating Spanish I

An introductory course in the art and practice of translating from English into Spanish and from Spanish into English. Material is divided into three segments: practice in bilingual translation of simple narrative, descriptive and expository material with emphasis upon fundamental structural comparison; analysis of bilingual renditions of selected well-known literary passages with emphasis on fundamental comparative stylists and with some student practice in translation; practice in bilingual translation of basic business correspondence.

Prerequisite: Intermediate-level proficiency

SPAN 300 Twentieth-Century Spanish Literature in Translation

A selective study of the major literary figures and significant trends in twentieth-century Hispanic literature. Emphasis is on such figures as Baroja, Unamuno, Ortega y Gasset, A. Machado, Jimenez, Salinas, Lorca, Guillen, Cela, Garcia Marquez, Fuentes, Borges, Carpentier, Sabato and Laguerre.

SPAN 301 Masterpieces of Spanish Literature in Translation

Some masterpieces of Spanish literature are discussed from the point of view of their universal appeal. *Don Quixote* by Cervantes, *The Cid* and *Life Is a Dream* by Calderon, the *Celestina*, tirso de Molina's dramatic prototype of Don Juan, and Garcia Marquez, Fuentes, Borges, Carpentier, Sabato and Laguerre.

SPAN 302 Caribbean Culture and Literature of the Twentieth Century

A study, conducted in English, of the Spanish American social and literary traditions in the Caribbean area (Dominican Republic, Puerto Rico and Cuba) and their major cultural works from the beginning of modernismo to the present. Representative works of Hostos, Marti, Henriques, Urena, Loynaz, Llorens Torres, Brull, Pales, Matos, Florit, Guillen, del Cabral, Marques, Bosch, Carpentier, Laguerre, others.

SPAN 331 The Golden Age of Spain

The great creations of the Spanish Golden Age. *El Lazarillo de Tormes* and *El Buscon* are read as examples of picaresque novels. Fray Luis de Leon, Santa Teresa de Jesus and San Juan de la Cruz are read as examples of mystical literature. An introduction to *Novelas Ejemplares* and *Don Quixote* is also included.

Prerequisite: Intermediate-level proficiency

SPAN 332 The Drama of the Golden Age

A study of the development of the national theatre of Spain through the plays of Lope de Vega, Tirso de Molina, Mira de Amescua, Calderon de la Barca, Alarcon, Guillen de Castro and others.

Prerequisite: Intermediate-level proficiency

SPAN 333 The Literature of Spain Until the Renaissance

A study of early literature of Spain from the *Cantar de Mio Cid* to *La Celestina*. Writers such as the Arcipreste de Hita, Don Juan Manuel and Fernando de Rojas are read intensively.

Prerequisite: Intermediate-level proficiency

SPAN 334 Romanticism in Spain: Prose and Poetry A study of poetry and prose of the Spanish romanticists. In the postromantic period special attention is given to Becquer and the aesthetics of the new poetry.

Prerequisite: Completion of one 200-level course in Spanish

SPAN 335 The Literature of Spanish America to Modernism

A study of main developments, literary currents and representative authors from the colonial period until 1888. Prerequisite: Completion of one 200-level course in Spanish

SPAN 336 Modernismo

A study of the modernismo literary movement in Spanish America from its beginning in 1882 to its conclusion in, approximately, 1917. Includes representative works of Marti, Gutierrez Najera, del Casal, Silva and Dario who make up the so-called first generation of modernist writers; Dario, Lugones, Herrera y Reissig, Valencia, Chocano, Nervo, Diaz Rodriguez, Reyles and others who comprise the second generation.

Prerequisite: Intermediate-level proficiency

SPAN 337 The Romantic Theatre in Spain

The emergence and development of the romantic theatre in Spain; in-depth study of such works as *Don Alvaro o la fuerza del sino, El Trovador, Don Juan Tenorio* and *Los amantes de Teruel.*

Prerequisite: Intermediate-level proficiency

SPAN 431 The Modern Literature of Spanish America: 1888 to the Present

A study of main developments, literary currents and representative authors from 1888 until the present.

Prerequisite: Completion of one 300-level course in Spanish

SPAN 432 Nineteenth-Century Literature of Spain A selective study of the major novelists and significant trends in the nineteenth-century Spanish novel. Emphasis is on such figures as Alarcon, Pereda, Valera, Galdos, Pardo Bazan and Alas.

Prerequisite: Completion of one 300-level course in Spanish

SPAN 433 The Novel of Spanish America

A study of major novels and short stories written by the most significant authors of Spanish America. Historical, aesthetical and social developments, as well as philosophical influences are the main themes studied in this course. Prerequisite: Completion of one 300-level course in Spanish

SPAN 434 Spanish Literature of the Twentieth Century

Selected study of major literary figures and significant trends in twentieth-century Spanish literature. Emphasis on such figures as Baroja, Unamuno, Azorin, Valle-Inclan, Ortega y Gasset, Benavente, Perez de Ayala, Machado, Jimenez, Salinas, Lorca, Guillen, Aleixandre, Sastre, Gironella, Cela and Laforet.

Prerequisite: Completion of one 300-level course in Spanish

SPAN 435 Cervantes and His Age

A study of Cervantes' artistic creation and its relation to the culture of the sixteenth century. Special emphasis is given to *Don Quixote* and the development of the novel as a genre.

Prerequisite: Completion of one 300-level course in Spanish

SPAN 436 The Modern Spanish American Essay

A selective study of the representative essay writers in Spanish America. Emphasis is placed on major opinion shapers, such as Varona, de Hostos, Rojas, Reyes, Henriquez, Urena, Picon Salas, Arciniegas, Mariategui, others. Prerequisite: Completion of one 300-level course in Spanish

SPAN 480 Seminar: Spanish America

Puerto Rican literature: Jose Marti, Ruben Dario, others. Prerequisite: One 300-level course in Spanish American literature

SPAN 481 Spanish Seminar

An in-depth study of a selected author or theme from Spain.

Prerequisite: One 300-level course in Spanish American literature

SPAN 499 Independent Study

As approved by the department.

1-3 credits

Other Languages

Chinese

CHIN 110 Basic Chinese I*

Provides students a basic understanding of Chinese pronunciation, grammar and knowledge of some Chinese characters and basic vocabulary. Emphasis is on drilling aural comprehension and elementary speaking of standard Chinese.

CHIN 111 Basic Chinese II*

A continuation of Basic Chinese I. Equal attention given to speaking, reading and writing. Writing consists of exercises in calligraphy and translation of simple sentences. Students are taught how to use a Chinese-English dictionary.

Prerequisite: CHIN 110 or equivalent

CHIN 112 Intermediate Chinese I*

Following continued training in fluent and accurate speech, students learn new vocabulary and more complicated sentences. Stress on the understanding sentence patterns which serve as a foundation for further study. Prerequisite: CHIN 111 or equivalent

CHIN 113 Intermediate Chinese II*

An intensification of CHIN 112. Students are introduced to a variety of topics in modern Chinese and work toward the goal of recognizing approximately 1,200 lexical items, including 1,000 characters. Students also learn how to write short compositions.

CHIN 200 Introduction to Chinese Culture and Literature

An introduction to the cultural and literary heritage of China from its beginnings to the present time. The course, taught in English, aims at a better understanding of Chinese culture and literature through the study of its sublime literary masterpieces.

CHIN 222 Advanced Chinese Conversation and Composition I

Concentrates on consolidating the foundations of pronunciation, grammar and character writing built in the first two years of study. Emphasis on discussing topics of general interest and writing essays.

Prerequisite: Intermediate-level proficiency

CHIN 223 Advanced Chinese Conversation and Composition II

A continuation of CHIN 222. Provides a wide range of more advanced vocabulary and a number of common sayings, as well as a metaphorical use of common words which form part of the verbal and cultural backgrounds of Chinese people.

Prerequisite: CHIN 222 or equivalent

CHIN 499 Chinese Independent Study As approved by the department. 1–3 credits

German

GER 110 Basic German I*

Intensive aural-oral practice, stressing the acquisition of the dual skills of listening comprehension and speaking; emphasis on everyday German. Reading of graded material in diverse areas of interest.

GER 111 Basic German II*

Reinforcement of aural comprehension and speaking ability. Current idiom, as used in meaningful context, is emphasized. Enhancement of reading ability by means of programmed readers.

Prerequisite: GER 110 or equivalent

GER 112 Intermediate German I*

Refinement and introduction to the subtlety of oral expression. Guided discussion of questions of topical interest. Reading of the more formal and intricate language of unedited texts; supplementary readings from newspapers, magazines and journals.

Prerequisite: GER 111 or equivalent

GER 113 Intermediate German II*

Development of free conversation with the aid of newspapers, magazines, tapes, recordings. Topics of contemporary interest provide a basis for an up-to-date, comprehensive view of Germany. Prerequisite: GER 112 or equivalent

GER 120 Scientific German

Designed for potential science majors and minors. Students receive guidance in reading current scientific and technological journals independently.

GER 499 German Independent Study

As approved by the department.

1-3 credits

Greek

GR 110 Classical Greek for Beginners 1

An introductory course which provides the student the basic elements of classical Greek. Primary emphasis is on structure and morphology; the aim is a graded reading knowledge. Since classical Greek is a nonliving language, classes expose the student to translation of simple grammatical forms and sentences in order to develop an extensive vocabulary.

GR 111 Classical Greek for Beginners II

Probes deeper into the reading and translation of complex forms of classical Greek. Primary emphasis is on syntax. Students are exposed to simple readings and translations of famous works of classical writers and taught how to handle variations of words with the aid of a dictionary in order to translate written material.

GR 499 Greek Independent Study

As approved by the department. 1-3 credits

Hebrew

HEBR 110 Basic Hebrew I*

The elements of Hebrew: elementary conversation, writing, fundamentals of grammar and reading of simple texts.

HEBR 111 Basic Hebrew II*

Continuation of Hebrew I: readings of text of medium difficulty, conversation and more complicated grammatical structure.

HEBR 499 Hebrew Independent Study

As approved by the department. 1-3 credits

Italian

IT 110 Basic Italian I*

Designed for students with no previous knowledge of Italian; aims at developing basic Italian speech patterns. After a thorough study of Italian pronunciation and intonation, the student develops a basic Italian vocabulary and learns how to use the Italian verb.

IT 111 Basic Italian II*

Aims at reinforcing and continuing to develop basic Italian speech patterns and at imparting the basic foundations in the four language skills, i.e., understanding, speaking, reading and writing.

*One hour lab work per week required

IT 112 Intermediate Italian I*

Designed for students who have a basic proficiency in Italian. Aims at strengthening the four language skills. Basic language patterns are reviewed, and new ones assimilated through conversation, reading and composition. Prerequisite: IT 111 or equivalent

IT 113 Intermediate Italian II*

Aims at strengthening further the four language skills, i.e., understanding, speaking, reading, writing through an essentially audio-lingual approach and the reading and discussion of literary selections.

Prerequisite: IT 112 or equivalent

IT 200 Introduction to Italian Culture and Literature

An introduction to the cultural and literary heritage of Italy from its beginnings to the present time.

IT 230 Twentieth-Century Italian Literature

A study of the significant trends, major prose writers and poets of modern Italian literature: Pirandello, Silone, Pavese, Montale, Ungaretti and others.

IT 300 Twentieth-Century Italian Literature in Translation

A study of selected writers who illustrate the main currents of twentieth-century Italian literature: Pirandello, Montale, Moravia, Pavese, Betti, Ungaretti and others.

IT 499 Italian Independent Study As approved by the department. 1–3 credits

Japanese

JPAN 110 Basic Japanese I*

Begins with an introduction to the Japanese sound system and to the romanization used in the textbook. Students are taught simple Japanese sentences with vocabulary introduced in a natural context and introduced to the hiragana and katakana syllabaries. Equal attention is given to listening, speaking, reading and writing.

JPAN 111 Basic Japanese II*

A more in-depth study of the Japanese sound system and the romanization used in the textbook. Students are taught more challenging vocabulary and sentence structure. The hiragano and katakana syllabaries are studied as well. Equal attention is given to speaking, reading, writing and comprehension.

JPAN 112 Intermediate Japanese I*

The course, designed as a continuation of Basic Japanese I and II, further increases the student's knowledge of Japanese grammar, vocabulary, idioms and characters, building on the previously acquired foundation in Japanese. Prerequisite: JPAN 111 or equivalent

JPAN 113 Intermediate Japanese II*

A continuation of Intermediate Japanese I. Further increases a student's knowledge of Japanese grammar, vocabulary, idioms and characters, building on the previously acquired foundation in Japanese. Prerequisite: JPAN 112 or equivalent

JPAN 499 Japanese Independent Study

As approved by the department.

1-3 credits

Latin

LAT 110 Latin for Beginners I

Introduces the basic elements of classical Latin. The student is exposed to the cultural and historical background of the Romans as a means of understanding the Roman contribution to our age and culture.

LAT 111 Latin for Beginners II

Reading and translating complex forms of classical Latin, stressing correlations with the English language. Prerequisite: LAT 110 or equivalent

LAT 499 Independent Study

As approved by the department. 1–3 credits

Portuguese

PORT 110 Basic Portuguese I

An introductory two-part course in modern Portuguese. The skills of understanding, speaking, reading and writing Portuguese are developed insofar as the realities and limitations of learning a foreign language in a classroom allow. Cultural information about Portugal, Brazil and other Portuguese-speaking countries is provided in conjunction with the acquisition of the language skills.

PORT 111 Basic Portuguese II

A continuation of PORT 110. More detailed study of grammar; practice in reading, writing, comprehension and speaking.

Russian

RUS 110 Basic Russian I*

An introduction to the Russian language, familiarizing the student with the Russian alphabet and Russian pronunciation, elementary grammar and conversation.

RUS 111 Basic Russian II*

A continuation of Basic Russian I; more detailed study of grammar, practice in reading, writing, comprehension and speaking.

RUS 112 Intermediate Russian I*

A review of grammar fundamentals, followed by a study of advanced grammatical structure and idiom; reading a variety of texts, composition and conversation.

RUS 113 Intermediate Russian II*

A continuation of Intermediate Russian I. Selected problems in grammar, sentence structure and idiomatic expression; a series of readings of moderate difficulty, with emphasis on reading comprehension and conversation.

RUS 499 Russian Independent Study

As approved by the department. 1–3 credits

*One hour lab work per week required

Department of Philosophy

Professors: M. Hailparn, A. Juffras, P. Rothenberg Associate Professors: M. L. Friquegnon, J. Peterman (chairperson)

Philosophy is an ancient Greek word meaning "love of wisdom." It is the study of our nature as human beings, the nature of the universe around us and how we can live successfully and happily in this universe. Peoples in all times and places have been concerned with these questions; and philosophy examines their responses along with those in recent literature, medical journals, law reviews, court decisions and other sources.

This requires critical thinking, the ability to ask the right questions and to answer them. Philosophy develops the skills needed for this, such as analysis of arguments, problem-solving methods, clear and persuasive expression of one's ideas and developing a broader perspective so our ideas might work tomorrow as well as today. All human ideas and activities are relevant to this study, including such areas as ethics (how people act), logic (how people think), aesthetics (how people judge what they like), metaphysics (the nature of space, time and life) and epistemology (how do we know what we know). Thus, we study science and religion, political and moral issues, propaganda and truth, beauty and commercialism, technology and happiness.

Philosophy is one of the traditional routes to law school, as well as advanced study in any of the humanities. Undergraduate degrees prepare one for positions requiring problem analysis, clear thinking and expression of ideas, such as managing or supervising in government or business, professional writing and precollege education. Graduate degrees prepare one for college teaching, consulting on ethical questions to hospitals and business and administrative positions in education and elsewhere.

MAJOR REQUIREMENTS 30		O CREDITS	
Core Course	s	6 credits	
PHIL 110	Introduction to	(does not	
	Philosophy co	unt toward	
	major req	uirements)	
PHIL 200	Ethics	3	
PHIL 210	Logic	3	
History		6 credits	
Two of the fo	ollowing:		
PHIL 215	The History of Ancient Philosop	ohy 3	
PHIL 216	Philosophy of the Middle Ages	3	
PHIL 217	History of Modern Philosophy	3	
PHIL 218	Nineteenth-Century Philosophy	:	
	Post-Kantian German Idealism	3	
Topical Areas		6 credits	
Two of the fo	ollowing:		
PHIL 220	Philosophy of Religion	3	
PHIL 222	Political Philosophy	3	
PHIL 223	Philosophy of Science	3	
PHIL 312	Metaphysics	3	
PHIL 317	Theory of Knowledge	3	
Great Thinkers		3 credits	
One of the following:			
PHIL 326	Plato	3	
PHIL 327	Aristotle	· 3	
PHIL 404	Seminar: Classics in Philosophy	, <u> </u>	
Electives		9 credits	

MINOR REQUIREMENTS 15 CREDITS Students must complete 15 credits of philosophy courses beyond the 100-level.

COURSES

Unless otherwise noted, all courses are for 3 credits.

PHIL 110 Introduction to Philosophy

Representative problems of philosophy, ranging from methods of inquiry, moral dilemmas, religious knowledge, problems of existence, artistic judgment and criticism to political and social philosophy.

PHIL 200 Ethics

This course is taught in one of two ways: (1) an examination of representative ethical theories ranging from Socrates, Plato, Aristotle, Epicurus, the Stoics, Hume, Kant, Bentham, Mill, Dewey and more recent philosophers; (2) an attempt to develop moral criteria by examining representative moral problems confronting society. An analysis is made of the nature of moral discourse and the meaning of moral terms.

Prerequisite: PHIL 110

PHIL 210 Logic

Covers formal techniques in the logic of propositions and predicate logic. Three kinds of deductive derivations direct derivation, conditional proof and indirect derivation—are considered as are shorter tests of validity and consistency. Recommended for debaters, lawyers, public speakers and computer science majors. Prerequisite: PHIL 110 PHIL 215 The History of Ancient Philosophy

The history of philosophy from the Pre-Socratics through Socrates, Plato, Aristotle, the Stoics, the Epicureans and early Neo-Platonists. Recommended for history majors. Also provides literature majors with the sources of classical intellectual allusions that abound in literature and drama.

Prerequisite: PHIL 110

PHIL 216 Philosophy in the Middle Ages

An introduction to philosophical ideas of the Middle Ages among Christians, Muslims and Jews. Emphasis on metaphysics of Augustine, Avicenna, Maimonides and the works of Aquinas and Ockham.

Prerequisite: PHIL 110

PHIL 217 The History of Modern Philosophy from Descartes to Kant

Deals with the seventeenth and eighteenth centuries, principally with the following problems: the assimilation of science as faced by Descartes, Spinoza and Leibniz; the order of nature suggested by Newtonian science and its effect on Locke, Berkeley and Hume; natural theology in the Enlightenment; the natural rights political philosophy of Locke, the British moralists.

Prerequisite: PHIL 110

PHIL 218 Nineteenth-Century Philosophy: Post-Kantian German Idealism

An introduction to post-Kantian German idealism as exhibited by Fichte, Schelling, Hegel, et al., and the transformation of and the reaction against idealism as seen in the writings of Schopenhauer, Marx, Kierkegaard and Nietzsche.

Prerequisite: PHIL 110

PHIL 220 Philosophy of Religion

An analytic study of religious beliefs. Emphasis on the problems of the meaning and truth of religious utterances; the existence of God; the compatibility of God and evil; the relationship between religion, psychology and morality; and the philosophical adequacy of mysticism, both East and West.

Prerequisite: PHIL 110

PHIL 221 Philosophy of Art

An examination of theories of art from Plato to Dewey. The role of inspiration, intelligence, skill, expression, experience and emotion in the arts is discussed. Prerequisite: PHIL 110

PHIL 222 Political Philosophy

Explores the relation between the state and the individual, asking what obligations and duties each has to the other. Also considers acts of civil disobedience and resistance and inquires into the role of tolerance in contemporary society.

Prerequisite: PHIL 110

PHIL 223 Philosophy of Science

Analyzes the logic of scientific inquiry and the logical structure of its intellectual products. Primarily an examination of both logical patterns exhibited in the organization of scientific knowledge and logical methods whose use, despite changes in special techniques and revolution in substantive theory, is the most enduring feature of modern science.

Prerequisite: PHIL 110

PHIL 224 Philosophy of the Social Sciences

Deals with the logic of social inquiry. Asks whether customary scientific methods apply to the social sciences. Examines explanatory proposals; e.g., hermeneutic interpretation (verstehen), functionalism, structuralism, behaviorism, et al.

Prerequisite: PHIL 110

PHIL 225 Philosophy of History

A philosophical examination of historical language and inquiry, the logic of historical development, problems of historical explanation and generalization and value judgments.

Prerequisite: PHIL 110

PHIL 227 Eastern Religion

A comparative study of the principal past and present Eastern religions and of man's religious feelings and experience.

Prerequisite: PHIL 110

PHIL 228 Critical Thinking and Scientific Method Covers methods of inquiry as used in empirical research. Explanation, hypothetico-deductive method, confirmation and types of inductive thinking form the basis of the course. In addition, special attention is given to relating course material to the thinking of the student. Prerequisite: PHIL 110

PHIL 300 Contemporary Analytic Philosophy

A study of the development of an important philosophical movement of the twentieth century, tracing its development from Bertrand Russell through the logical positivists, Ayer and Carnap, G.E. Moore, Gilbert Ryle, to ordinary language analysis, exemplified by Wittgenstein and Austin. Prerequisite: PHIL 110

PHIL 305 Existentialism and Phenomenology

Examines such existential themes as death, freedom, responsibility, subjectivity, anguish, time and the self as they appear in both literary and philosophical works. Phenomenology as one philosophical method which can be applied to such themes is considered. Includes the works of Sartre, Kierkegaard, Camus, Kafka, Heidegger and others.

Prerequisite: PHIL 110

PHIL 309 Studies in the Utopian Theme

A philosophical examination of Utopian thinking about such questions as, "What is the nature of the good life?," "What is the nature of the good man?," "What is the nature of the ideal society?" Throughout, emphasis is on the relevance of past questions and answers to the dilemmas of contemporary society. Prerequisite: PHIL 110

PHIL 312 Metaphysics

Several traditional and recent views of the problem of existence and associated problems are discussed. Included are the relation between appearance and reality, mind and matter, mind and body, the nature of substance and personal identity. Prerequisite: PHIL 110

PHIL 315 Philosophy of Mind

The philosophical problems associated with the relation of mind and body, mind and matter, willing and acting. Also, a consideration of some representative solutions ranging from monism, dualism, epiphenomenalism, psychophysical parallelism and behaviorism. Recent research in psychology, neurophysiology and robot and computer automata studies is considered.

Prerequisite: PHIL 110

PHIL 317 Theory of Knowledge

An examination of the philosophical issues surrounding the notions of necessary truth, empirical knowledge, a priori knowledge, analytic statements and related topics. Views of traditional and contemporary philosophers are discussed.

Prerequisite: PHIL 110

PHIL 318 American Philosophy

An introduction to American philosophy through reading and examining selected writings of such classical American philosophers as Pierce, James, Royce, Dewey and Santayana.

Prerequisite: PHIL 110

PHIL 320 Philosophy of the Future

Emphasizes the future rather than the past. Various futuristic visions for the next twenty to thirty years and the projection techniques used are examined in the context of how the future will affect people and their environments. Prerequisite: PHIL 110

PHIL 323 Introduction to Marxism

A basic, introductory course in Marxism with special attention to dialectical materialism, the theory of class struggle, alienation and revolution. The writings of Marx and Engels are considered in terms of their philosophical antecedents and are subjected to analysis within the content of the development of philosophical attempts to understand the nature of reality. Issues in epistemology and metaphysics are raised.

Prerequisite: PHIL 110

PHIL 324 Philosophy of Sexual Politics

The application of philosophical techniques of analysis to a study of the nature and position of women in contemporary society. Focus is on critical evaluation of the alternate models for understanding women's oppression. Selected writers include Eva Figes, Betty Freidan, Simone de Beauvoir, Frederick Engels and Shulamith Firestone. Prerequisite: PHIL 110

PHIL 326 Plato

A modern thinker said that all of philosophy has been a series of footnotes to Plato. This ancient Greek thinker developed in his *Dialogues* a method of analysis and expression which is still fresh and vital. The course examines such questions as the nature of human excellence, how to succeed in life, how to tell a lie (and how to recognize one), what is the best form of government and whom should you love. Typical readings include the *Republic, Symposium, Meno, Protagoras* and *Phaedrus*. Prerequisite: PHIL 110

PHIL 327 Aristotle

Aristotle was Plato's student and presented his ideas in a much more systematic and straightforward manner. His works attempt to explain specific areas of human experience, such as the basic rules of logical thought, the nature of mind, how we should act and why poetry moves us to laugh and cry. Typical readings include the Ethics, Politics, Organon (works on logic) and Metaphysics (which examines why and how what is, is). Prerequisite: PHIL 110

PHIL 330 David Hume and the Skeptic Tradition

A brief study of the skeptic tradition from the sixteenth century to Hume. An intensive study of Hume's principal works covers his views on the origin of ideas, meaning, causality, science, induction, the proofs of God's existence, his relation to Locke and other predecessors and his influence on Kant.

Prerequisite: PHIL 110

PHIL 333 Philosophy of Law

Deals with both the development of law and an analysis of its principles and concepts. Examines and discusses the relationship between law and morality and law and justice; the logical principles in legal arguments; and various kinds of legal theories; e.g., natural law, legal positivism and legal realism.

Prerequisite: PHIL 110

PHIL 334 **Business and Ethics**

A study of large corporations as quasi-political and social institutions. Examines capitalism as a revolutionary force of the twentieth century and the consequences for society implied in the social attitudes that prevail and endure in these institutions.

Prerequisites: PHIL 110 and 200

PHIL 336 From Religion to Philosophy

Covers the transition from a reliance on prophets, poets, dramatists and the "wise man," to a reliance on the philosopher in matters dealing with human action, inquiry and artistic products.

Prerequisite: PHIL 110

PHIL 337 Greek Political Philosophy

Covers the development of Greek political ideas from the Homeric age up to and including the historical Polybius. Focal points are Sophists, Socrates, Isocrates, Thucydides, Plato and Aristotle. Changes in political ideas are carefully placed in their historical context. Prerequisite: PHIL 110

PHIL 340 Western Religion

A comparative study of the principal religions of the West, past and present; of what is common to many and peculiar to each; and of man's religious feelings and experience. Prerequisite: PHIL 110

PHIL 402 Advanced Logic

A study of the nature of a formal deductive system, including the proofs of completeness, consistency and independence. The equipollence of deductive systems is also examined, and more advanced notions of predicate logic, multiple quantification, higher functional logic and logic of relations are covered.

Prerequisites: PHIL 110 and 210

PHIL 404 Seminar: Classics in Philosophy

A classic work in philosophy is explored in depth from among the following: one of Plato's dialogues, a treatise from Aristotle, Augustine, St. Thomas; or works such as Kant's Critique of Pure Reason, Mill's Utilitarianism, James' Pragmatism, et al.

Prerequisite: PHIL 110

PHIL 499 Independent Study As approved and to be arranged. 1-3 credits

School of Management

School of Management

Anthony M. Akel, Dean Office: White Hall E1

The School of Management offers a bachelor of arts degree in accounting, economics and business administration. Business administration majors may choose from concentrations in management, marketing and finance. In addition, the school offers a bachelor of science degree in computer science.

Standards

All freshman students intending to pursue a major within the school must follow a structured curriculum. All students, at the completion of 30 credits, must have attained a grade point average of 2.5 or better. Students who do not meet this standard may not continue in a major program in the School of Management. They will be referred to the Dean of Students for counseling and must withdraw from the major in the School of Management. Only those stu-

Department of Accounting and Law

Professors: C. Anyanwu, J. M. Waiguchu

Associate Professors: N. Bassano, R. Bing, F. Cahill, R. Davis, M. Rudnick (chairperson), G. Sheehan, R. C. Grier Assistant Professors: H. Davidoff, F. Grippo, A. Weinstein, J. Wilkerson

William Paterson College offers an extensive program in the field of accounting, which prepares students for positions in two general areas, public accounting and private accounting.

Public Accounting

Students who successfully complete the accounting curriculum meet the minimum requirements set forth by the State Board of Accountants and are allowed to sit for the CPA examination. Special review courses are offered to assist students in meeting standards of the board. After successful completion of the examination, a two-year work requirement is needed to receive a certificate.

Most CPAs practice as individuals or in major firms. A growing trend in recent years has been the CPA-manager who combines the skills of the accounting professional with managerial qualities needed in business. dents with valid major School of Management codes may register for 300- and 400-level courses in the school.

Students are reviewed after having completed 60 credits to insure that their cumulative average of 2.5 or better is being maintained. In addition, all students in the school are expected to maintain a minimum 2.5 grade point average in their major courses in addition to their overall cumulative grade point average of 2.5 or better.

Transfer students seeking admission to the School of Management must have attained an overall grade point average of 2.5 or better at the institution(s) from which they are transferring and must have satisfied other appropriate curricular requirements.

In addition, the transfer of upper-level courses taken in business, economics, accounting and computer science at the junior college level is subject to validation before being credited towards a major.

State CPA requirements to qualify for examination are as follows:

- 1. Applicant must be 18 years old
- 2. Applicant must:
 - a. be a resident of the state of New Jersey or
 - b. be in the employ of a certified public accountant or firm or certified public accountants having an office and performing services in the state of New Jersey or
 - c. be engaged in the state of New Jersey for the regular practice of public accounting
- 3. Education: see below
- 4. Examinations are given twice a year, in May and November. Students must file a completed application in the Office of the Secretary of the State Board of Accountancy on or before March 1 for the May examination or September 1 for the November examination. Residency determines examination site—northern or southern locations
- 5. When requested, applicant must appear before the board and/or any character committee appointed by the board
- 6. It is the responsibility of applicants to familiarize themselves with the Rules of Professional Conduct. It is written in the Accountancy Law that every applicant for the CPA Certificate is bound by these rules.

Accounting Internship

The department offers an internship in accounting for outstanding senior students. Students intern in area accounting firms for a six- to eight-week period in their senior year. Admission to the internship is competitive, based on the student's grade point average and other criteria. Students interested in this internship should contact the department coordinator.

Private Accounting

For students who are not interested in pursuing a CPA but are interested in responsible financial positions, the program outlined below makes provision for the professional flexibility that both public agencies and private firms require of students entering the field of finance.

MAJOR REQUIREMENTS		63 CREDITS
School of Management Core		33 credits
ACCT 211	Principles of Accounting I	3
ACCT 212	Principles of Accounting II	3
ECON 202	Microeconomics	3
ECON 210	Economic Statistics I	ʻ 3
FIN 320	Corporate Finance	3
LAW 201	Legal Environment of Busine	ss 3
MGT 300	Principles of Management	ss 3 3
MGT 305	Management Information Sys	
MGT 431	Production and Operational	
	Management	3
MGT 460	Business Strategy and Policy	3
MKT 310	Marketing	3
Accounting Courses		24 credits
ACCT 311	Intermediate Accounting I	3
ACCT 312	Intermediate Accounting II	3
ACCT 340	Cost Accounting I	3
ACCT 370	Auditing	3
ACCT 411	Taxation I	3
ACCT 412	Taxation II	3
ACCT 420	Advanced Accounting I	3
Additional Re	equirements	6 credits
LAW 251	Business Law I: Contracts	3
LAW 252	Business Law II: Sales and	
	Negotiable Instruments	3
or		
ACCT 430	Advanced Accounting II	3

COURSES

Unless otherwise noted, all courses are for 3 credits.

ACCT 211 Principles of Accounting I

Introductory course in the fundamental principles of accounting, the theory of debit and credit, account classification, preparation of working papers, adjusting, closing, reversing entries and preparation of basic financial statements. Use of LOTUS 1-2-3, Multimate and d-BASE III. Prerequisite: CS 201

ACCT 212 Principles of Accounting II

Introduces accounting for partnerships and corporations. Also, basic concepts of cost accounting, taxation and the use of accounting as a decision-making tool for management.

Prerequisite: ACCT 211

ACCT 311 Intermediate Accounting I

Review of basic financial statements and in-depth study of accounting principles advanced by responsible professional organizations in the classification, presentation and disclosure of assets required for external users of financial information. Use of LOTUS 1-2-3, Multimate and d-BASE III.

Prerequisites: ACCT 212 and CS 201

ACT 312 Intermediate Accounting II

In-depth study of accounting principles advanced by responsible professional organizations in the classification, presentation and disclosure of liabilities and stockholders equity required for external users of financial information.

Prerequisite: ACCT 311

ACCT 340 Cost Accounting I

Cost accounting and its contribution to management, the cost accounting cycle, cost data accumulation, job order costing, process cost accounting procedures, materials, labor and overhead costing and control, costing of by-products, coproducts and joint products. Prerequisite: ACCT 312

Prerequisite: ACCI 512

ACCT 370 Auditing

Reviews the procedures and practices used in auditing the financial transactions and statements of an organization. Internal control, test of transactions and audit standards employed are discussed and demonstrated by actually doing an audit of a practice company. Prerequisite: ACCT 312

ACCT 410 Taxation I (same as FIN 410)

A study of the U.S. Internal Revenue Code with emphasis on income taxation of individuals. Provides practice in the preparation of tax returns and solution of case problems. Concentrates on the problems of the U.S. individual income tax. Also examines taxation of corporations and partnerships.

Prerequisite: ACCT 212

ACCT 411 Taxation II (same as FIN 411)

A study of the U.S. Internal Revenue Code with emphasis on the taxation of corporations, partnerships, estates and trusts. Federal payroll, gift and estate and New Jersey taxes are also covered.

Prerequisite: ACCT 410

ACCT 420 Advanced Accounting I

An in-depth study of principles used in accounting for parent and subsidiary companies, partnerships and other specialized areas of accounting. Prerequisite: ACCT 312

ACCT 430 Advanced Accounting II

Intensive review and analysis of basic and advanced concepts, skills and principles. Imperative for students who intend to apply for a certifying examination. Prerequisite: ACCT 370

MANAGEMENT

LAW 120 Introduction to Law and Legal Systems A liberal studies survey course for students of all curricula. Designed to acquaint them with the operation of the American legal system. Among topics covered are the law of torts, criminal law and procedures, civil procedures, administrative law and the court systems, both state and federal. Open to all students.

LAW 201 Legal Environment of Business

Designed to familiarize students with the legal system with particular emphasis on the court system and administrative agents. Also includes examination of substantive areas such as antitrust, bankruptcy, corporate law, partnership and securities regulations.

LAW 206 Substantive Criminal Law

Designed to acquaint students with penal codes and concepts such as criminal liability, anticipatory offenses, offenses against the person and property, offenses involving fraud and offenses against public administration. Scrutinizes defenses such as self-defense, insanity, duress, infancy and entrapment. Open to all students. Prior completion of LAW 120 preferred.

LAW 210 Law of Torts

Designed to acquaint students with the principles of private wrongs for which the courts afford injured parties a remedy in the form of damages. Detailed study of concepts such as assault and battery, libel, false arrest, trespass, malicious prosecution, negligence, malpractice, strict liability and vicarious liability. Also examines defenses such as self-defense, mistake, consent, privilege and necessity. Open to all students. Prior completion of LAW 120 preferred.

LAW 251 Business Law I: Contracts

Designed to acquaint students with the laws of contracts. Examines concepts such as offer, acceptance, consideration, competent parties, legal subject matter, assignments and third party beneficiaries. Scrutinizes defenses such as statute of fraud, infancy, insanity and parole evidence. Core course for all School of Management majors. Open to all students.

LAW 252 Business Law II: Sales and Negotiable Instruments

Acquaints students with Articles II, III, IV and IX U.C.C. Critically examines concepts such as warranty, risky loss, bona fide purchases for value, products liability, negotiability, checks, notes, holder in due course and secure transactions.

Prerequisite: LAW 251

LAW 253 Business Law III: Agency Partnerships/ Corporations

Designed to acquaint students with the laws of agency partnerships and corporations. Topics include creation, termination and rights and duties of principal and agent; creation, termination, authority duties, rights of partners; creation, termination, corporate powers, shareholders, management of corporations. Prerequisite: LAW 251

LAW 421 Real Estate I

A detailed study of the principles and practices of real estate, including ownership, contracts, deeds, conveyances, mortgages and titles to realty. Methods of financing real estate and the role of the real estate broker are emphasized. The role of real estate in the economy is also examined.

Prerequisites: LAW 251 and 252

LAW 422 Real Estate II

A study of the law of real estate. Topics covered in detail include real estate brokerage, the real estate broker and the law, rights of lien, taxes, leases and property insurance and management, land subdividing and developing, city planning and zoning, housing legislation and home ownership. Condominiums, cooperatives and other types of real estate are distinguished.

Prerequisite: LAW 421

9 credits

Department of Computer Science and Quantitative Analysis

Chairperson: L. S. Cheo

Computer Science Program

Professors: L. S. Cheo, P. Nagin, L. Presby Associate Professors: E. Hu, J. Najarian, P. Radzikowski Assistant Professors: A. Moini, M. Schlafmitz

The computer science program consists of a minor and a bachelor of science degree program. The minor, open to all students regardless of discipline, requires students to successfully complete a minimum of 18 credits in the computer science area. The degree program requires students to complete 27 credits of major requirements, 9 major elective credits and 10 credits of major corequisites. A minor in quantitative analysis is also offered.

The high-quality programs offered by the department have led to chapter membership in Upsilon Pi Epsilon, the Computing Science Honor Society, and a student chapter membership in the Association for Computing Machinery (ACM).

Computer facilities consist of an in-house AT&T 3B2/400 Supermicro computer system, a remote job entry (RJE) system, 25 interactive (full-screen editor) IBM 3179 terminals, 25 IBM/PCs, 20 Zenith microcomputers with 20 meg. hard disks and 21 Apple II microcomputers. RJE and all terminals, as well as IBM/PCs are connected to two main frames, IBM 370/3033U and IBM 370/4381, located at New Jersey Educational Computer Network (NJECN). IBM/PCs are used as stand-alone, Local Area Network (LAN) and terminals to perform file transfer task between the main frames and the micros (PCs). An advanced laboratory, consisting of an AT&T 3B2/400 system (running UNIX system with nine terminals) and five AST/286 microcomputers with 20 meg. hard disks, is also available to upper-level computer science students.

In addition, for students interested in learning various types of deterministic and probabilistic simulation as well as problem-solving techniques through an analog device, an EAI Analog computer system is available. All computing equipment is located in the Coach House Computer Center, except the analog computer which is located in White Hall.

60 CREDITS

COMPUTER SCIENCE MAJOR REQUIREMENTS*

-			
Core Require	ments	27	credits
CS 140	Computer Science I		3
CS 240	Computer Science II		3
CS 260	Discrete Structure		3
CS 280	Computer and Assembly Langua	ge	3
CS 341	Computer Design		3
CS 342	Data Structure		3
CS 345	Operating Systems		3
CS 360	Computer Calculus		3
CS 480	Computer Science Seminar		3

Computer Science Electives

(6 credits from 400-level courses)			
CS 330 .	Linear Programming and Operat	ions	
	Research	3	
CS 362	Computer Simulation	3	
CS 380	Data Communications and		
	Computer Network	3	
CS 399	Special Topics	3 3 3 3 3 3 3 3 3 3	
CS 410	Artificial Intelligence	3	
CS 420	Compiler Construction	3	
CS 440	Data Base Management	3	
CS 445	Automata	3	
CS 461	Computer Graphics	3	
CS 462	System Simulation	3	
CS 499	Independent Study	3	
School of Ma	inagement Requirements	9 credits	
ACCT 211	Principles of Accounting I	3	
ECON 202	Microeconomics	3	
ECON 210	Economic Statistics I	3	
Corequisites	;	10 credits	
CS 201	Computer Literacy and		
	Microcomputer Applications	3	
CS 270	Computer Statistical Techniques		
or			
CS 362	Computer Simulation	3	
MATH 161	Calculus II	4	
Free Electives		5 credits	

*For students entering WPC as computer science majors in or after fall 1986.

COMPUTER SCIENCE MINOR PROGRAM 18 CREDITS

(Open to all noncomputer science majors)

Required Co	urses	12 credits
CS 140	Computer Science I	3
CS 240	Computer Science II	3
CS 260	Discrete Structures	3
CS 280	Computer and Assembler Langu	age 3
Electives		6 credits
Choose two courses:		
CS 341	Computer Design	3
CS 342	Data Structure	3
CS 360	Computer Calculus	3
CS 362	Computer Simulation	3

Quantitative Analysis

Professor: L. Presby Associate Professor: L. Gaydosh

The concentration in quantitative analysis is open to all students.

QUANTITATIVE ANALYSIS MINOR 18 CF		8 CREDI	TS
Required Courses		9 cred	lits
ECON 210	Economic Statistics I		3
MATH 120	Finite Math		3
MATH 150	Applied Calculus		3
Additional Courses 9 cr		9 cred	its
CS 270	Computer Statistical Technique	s I	3
CS 330	Linear Programming and Opera	ations	
	Research		3
CS 362	Computer Simulation		3
ECON 211	Economic Statistics II		3
ECON 430	Econometrics		3
MGT 470	Introduction to Operations Res	earch	3

COURSES

Unless otherwise noted, all courses are for 3 credits.

CS 130 Introduction to Computer Programming/ BASIC

Introduces the basic principles and applications of computing systems, microcomputers in particular. Techniques of computer programming are introduced through BASIC.

CS 140 Computer Science I

An introduction to design and representation of algorithms. Problem solving and programming techniques: top-down analysis and recursion. Emphasizes computer solution of numerical and nonnumerical problems using PL/I.

Prerequisite: MATH 115 or equivalent and any high school level programming language

CS 201 Computer Literacy and Microcomputer Applications

Designed to present an overview of computers, computer science and use of computers. The course familiarizes students with hands-on experience and various types of applications. Popular software packages, such as LOTUS 1-2-3, Multimate, PFS and dBASE III are used to introduce spreadsheets, word processing and application of data base concepts.

CS 235 Introduction to FORTRAN

Designed to teach students how and why a computer is used. The student gains the experience of how to program in the FORTRAN programming language. Simple applications in the most frequently used mathematical models are included.

CS 240 Computer Science II

File handling, recursion and advanced program constructs in PL/I. Analysis of algorithms, strategies for learning new languages.

Prerequisite: CS 140

CS 253 COBOL I

Introduction to the COBOL language with applications to commercial problems. Topics in business information processing such as payroll and inventory management are examined.

CS 260 Discrete Structures

A study of the mathematical theory and techniques underlying computer science. Topics: combinatorial analysis, graph theory, Boolean algebra, set theory, matrices, probability and statistics.

Prerequisite: CS 140

CS 270 Computer Statistical Techniques

An introductory course to study the existing major statistical packages such as DATA-TEXT, BMD, SPSS, SAS, etc. Some basic JCL concepts used for this purpose are discussed. Topics include statistical programs and their applications, chi-square, regression, correlation, factor analysis, analysis of variance and multiregression. Prerequisites: CS 140 and MATH 130 or ECON 210

CS 280 Computer and Assembler Language

An introduction to the study of the basic structure and language of machines. Topics include basic concepts of Boolean algebra, number systems, language, addressing techniques, data representation, file organization, symbolic coding and assembly systems, use of macros, batch operation and job handling.

Prerequisites: CS 240 and 260

CS 330 Linear Programming and Operations Research

An introduction to the concept of operations research and mathematical techniques applied to decision problems when the inputs are known. Topics include linear, non-linear and dynamic programming with applications to transportation, assignment, resource allocation, production scheduling and inventory problems.

Prerequisites: CS 240 and 260

CS 341 Computer Design

An introduction to the internal structure of digital computers. Topics include construction of basic digital circuits such as adders, counters and decoders; functional description of a digital computer; execution of program instructions; arithmetic unit; machine addition, subtraction, multiplication and division; memory structure, organization and control of input/output facilities; concepts of microprocessing and microcomputers.

Prerequisites: CS 280 and PHYS 256

CS 342 Data Structures

An introduction to data structures. Topics: strings, lists, restricted data structures, graphs and trees, file structures, sorting, searching, memory management and advanced data structure applications.

Prerequisites: CS 240 and 260

CS 345 Operating Systems

An introduction to operating systems and design. Topics include file system, memory management and concurrent processes. Experience is developed in several operating systems, such as UNIX, DOS and MVS/XA, etc. Prerequisite: CS 280

CS 352 COBOL II

A study of the data processing systems and advanced features of COBOL. Topics include binary number systems, computer system design, card systems, tape systems, direct access systems, operating systems and job control language; modular programming, structure programming, subprograms and COBOL Compiler supplied subprogram; report writers, sorting and merging procedures; program debugging; test data; computer security and privacy.

Prerequisite: CS 253

CS 360 Computer Calculus

Emphasizes building algorithms for solution of numerical problems, the sensitivity of these algorithms to numerical errors and the efficiency of these algorithms. Topics: solutions to nonlinear equations, systems of linear equations; interpolation and quadrature solutions; numerical differentiation and integrations; eigenvalues and eigenvectors.

Prerequisites: CS 240, 260 and MATH 161 (MATH 202 recommended)

CS 362 Computer Simulation

Probabilistic simulation models: generation of random numbers, Monte Carlo method; elementary queuling theory. Deterministic simulation models; applications to physics, economics and biological processes. Other nonnumerical problems included are searching and sorting techniques, information retrieval techniques. Prerequisites: CS 240, 260, 270 or equivalent

CS 380 Data Communications and Computer Network

Introduces the basic concepts, principles, design procedures and applications of computer networks and data communication systems. ISO reference model is used as the basis to discuss the general functions and protocols of the network architecture. Typical networks such as AR-PANET and others are discussed in relation to the ISO reference model. This course also introduces students to other important issues in data communications including network security, network management, etc. Prerequisites: CS 270, 342 and PHYS 256

CS 399 Special Topics in Computer Sciences

This course is designed to implement new topics on an experimental basis.

Prerequisite: Instructor's permission

CS 410 Artificial Intelligence

Problem representation, search strategies and list processing. Exercise in using current expert system construction tools.

Prerequisites: CS 240, 260 and 342

CS 420 Compiler Construction

An introduction to the major techniques used in compiler writing. Topics include formal language theory, lexical and syntactic analysis, code generation and optimization, error diagnostics and recovery. Prerequisite: CS 342

CS 440 Data Base Management

Flow of data, its representation, transmission and storage. Topics include data collection, conversion and verification; data transmission systems; data representations; data organization and storage; data manipulation and file management; data calculation; information display and retrieval; storage-program concepts and processing techniques; programming and operating systems. Prerequisite: CS 342

CS 445 Automata

This course emphasizes the central concepts of effective procedures of computer-like machines, such as finite-state machines, pushdown automation, register machines and the Turing machine. Topics include automata made up of parts, the memories of events in finite-state machines, computability, the relation between the Turing machine and recursive functions.

Prerequisite: CS 360

CS 461 Computer Graphics

An introduction to computer graphic principle and techniques. Design of interactive computer graphic systems, including display devices, display files and image generation, application to architectures, animation and other fields.

Prerequisite: CS 360

CS 462 System Simulation

Introduction to the principles of simulation and the application of several simulation languages to systems studies. Discussion of the techniques applicable to both continuous and discrete systems and an explanation of the probability theory and statistical techniques involved in the construction of valid models and in analyzing results. Prerequisite: CS 362

CS 480 Computer Science Seminar

Current topics in computer sciences are discussed. Prerequisites: CS 342, 360 and instructor's permission

CS 499 Independent Study

As approved and to be arranged.

Department of Economics and Finance

Professors: G. Dorai, A. Eapen (chairperson), W. Hamovitch, B. Haroian, M. Laurence, C. K. Leung Associate Professors: A. Ghosh, C. Liddicoat, P. Swanson Assistant Professors: O. Hagopian, T. Ramin

The economics program provides students a broad conceptual framework to understand the social interrelations of consumers, businesses, workers and the government. In addition to studying questions of a general politicaleconomic nature, students majoring in economics learn the analytical tools of economic decision making. Flexibility is built into curriculum so that students may seek employment upon completion of their four-year program, or, if they prefer, continue on to graduate school for further study.

There are two separate tracks offered in the economics program. The first is a traditional liberal arts track which emphasizes economics as a social science. This track is an excellent and rigorous preparation for a variety of fields. The second is a business-oriented track, requiring a core of business courses. This track provides a good background for management, finance and business administration.

The department also offers a finance concentration for students who wish to have careers with banks or other financial institutions. In addition to taking the School of Management core, students must take 21 credits of finance courses.

Economics Major

MAJOR REQ	UIREMENTS (Liberal Arts)	39 CREDITS	
Required Economics Courses		15 credits	
ECON 202	Microeconomics Principles	3	
ECON 210	Economic Statistics I	3	
ECON 211	Economic Statistics II	3	
ECON 301	Macroeconomic Theory	3	
ECON 302	Microeconomic Theory	3	
Elective Economics Courses		18 credits	
Six courses with catalog numbers above ECON 302			
Additional Requirements 6 credits			
ACCT 211	Principles of Accounting I	3	
CS 235	Introduction to FORTRAN	3	

Note: Business-related courses *must* be *less than one-fourtb* of the total credits in this track.

Students are encouraged to select courses in such related areas as political science, sociology/geography/arıthropology, history, philosophy and African and Afro-American Studies.

MAJOR REQUIREMENTS

(Business-Economics)		60 CREDITS
School of Management Core		33 credits
ACCT 211	Principles of Accounting I	3
ACCT 212	Principles of Accounting II	3
ECON 202	Microeconomics	3
ECON 210	Economic Statistics I	3
FIN 320	Corporate Finance	3
LAW 201	Legal Environment of Busine	ss 3
MGT 300	Principles of Management	3
MGT 305	Management Information Sy	stems 3
MGT 431	Production and Operations	
	Management	3
MGT 460	Business Strategy and Policy	3
MKT 310	Marketing	3
Economics (Courses	21 credits
ECON 211	Economic Statistics II	3
ECON 301	Macroeconomic Theory	3
ECON 302	Microeconomic Theory	3
Economic El	ectives (upper level)	
Additional Requirements		6 credits
MINOR REQUIREMENTS		18 CREDITS
ECON 201	Macroeconomic Principles	3
ECON 202	Microeconomic Principles	3
Additional Economics Courses		12 credits

COURSES

Unless otherwise noted, all courses are for 3 credits.

ECON 201 Macroeconomic Principles

Concentrates on the basic economic principles relevant to the resource utilization problems of the economy as a whole. Theories and policies which relate to the economy's total level of output, total income, total level of employment, total expenditures and the general level of prices are treated at an introductory level.

ECON 202 Microeconomic Principles

Concentrates on the basic economic principles relevant to resource allocation. Demand and supply analysis is used to explain at an introductory level two major topics: (1) price determination in competitive as well as imperfectly competitive markets such as monopoly, oligopoly and monopolistic completion and (2) distribution of income among resources.

ECON 210 Economic Statistics I

Descriptive statistics (collection and presentation of data, frequency distributions, measures of central tendency, dispersion and skewness); index numbers' simple correlation and regression; curve fitting; introduction to statistical inference, sampling and probability. Prerequisite: MATH 120

ECON 211 Economic Statistics II

Sampling distribution of the sample statistics, probability limits and tests of significance; statistical inference and confidence limits; operating characteristic curves; simple experimental design; applied probability for decision making.

Prerequisite: ECON 210

ECON 230 Economics of the Environment

Examines problems of environmental quality as an economic problem. The role that economic analysis plays in providing both public and private decision-makers with alternative solutions to environmental problems is stressed.

ECON 301 Macroeconomic Theory

A systematic treatment, on an advanced level, of the factors determining the level of output, income and employment of the economy as a whole.

Prerequisites: ECON 201 and 202

ECON 302 Microeconomic Theory

An analytic treatment, on an advanced level, of theories and techniques of price determination. Theories of income distribution and general equilibrium are also considered.

Prerequisites: ECON 201 and 202

ECON 303 International Finance

A study of international financial transactions designed to help students understand the economic interdependence of nations. Analysis of exchange rates, balance of payments, international capital movements, as well as fiscal and monetary policies in an open world economy.

ECON 310 Money and Banking

(also listed as FIN 311)

A study of the key concepts, theories, processes and interrelationships that link money and banking to the workings of the U.S. economy. This course analyzes how banks and other depository institutions serve as a conduit for the implementation of monetary policy. The structure, functions, powers and monetary tools of the Federal Reserve are also examined.

Prerequisites: ECON 201 and 202

ECON 321 Public Finance

A study of the economic principles which are most useful in analyzing the government's role in the economy; the economic principles to be stressed are those which are particularly helpful in the microeconomic analysis of tax and expenditure policies. Sources of revenues, as well as expenditures for health, defense, education, social security and welfare programs are analyzed. Prerequisites: ECON 201 and 202

ECON 328 Economic History of the United States (also listed as HIST 328)

Emphasizes economic elements in the historical growth of the United States from colonial to contemporary times. An analysis is made of the changing role of government, technological innovation, industrial pioneering and competition in the development of the American economy.

ECON 340 Labor and Management in the American Economy (also listed as MGT 340)

An examination of how labor and management are affected by various theories and institutional approaches and policies, such as public legislation on labor and management relations, collective bargaining, labor unions, inflation and unemployment.

Prerequisites: ECON 201 and 202

ECON 360 Theory of Economic Growth and Development

A study of the sources of economic growth and development and the private and public policies which affect this historical trend. Both underdeveloped and developed countries are considered.

Prerequisites: ECON 201 and 202

ECON 370 International Economics

A study of the theoretical and empirical bases for international economic transactions among nations. Emphasis is placed on understanding various theories of trade; costs and benefits of international specialization; protectionism, quotas, tariffs and trade policy. Prerequisites: ECON 201 and 202

ECON 390 Comparative Economic Systems

A study of the actual operations of various economic systems as they seek the optimum use of the human and natural resources available to them. The ideological, technological and organizational features of each system are stressed.

Prerequisites: ECON 201 and 202

ECON 410 Managerial Economics (also listed as FIN 420)

The application of economic analysis to the solution of individual business problems. Among the primary areas covered are demanded forecasting, cost and profit analysis and capital budgeting.

Prerequisites: ECON 201, 202, 210 and 211

ECON 430 Econometrics

The ordinary least squares criterion is scrutinized. The problems of estimating demand, supply, consumption, production and cost functions are treated in depth. Prerequisites: ECON 201, 202, 210 and 211

Finance Major

School of Management Core (see above)		33 credits
Finance Courses		21 credits
ECON 211	Economic Statistics II	3
FIN 311	Money and Banking	3
FIN 400	International Financial Managen	nent 3
FIN 403	Capital Budgeting	3
FIN 410	Taxation I	3
FIN 420	Managerial Economics	3
FIN 435	Principles of Investment	3
Additional Requirements		6 credits

COURSES

Unless otherwise noted, all courses are for 3 credits.

FIN 311 Money and Banking (also listed as ECON 310)

A study of the key concepts, theories, processes and interrelationships that link money and banking to the workings of the U.S. economy. This course analyzes how banks and other depository institutions serve as a conduit for the implementation of monetary policy. The structure, functions, powers and monetary tools of the Federal Reserve are also examined.

Prerequisites: ECON 201 and 202

FIN 320 Corporation Finance

A study of the basic principles and practices of the financial management of private business corporations. The course provides an operational framework for financial analysis, planning and forecasting, along with profit analysis and financial control for today's business world.

Prerequisites: ACCT 211, 212, ECON 201 and 202

FIN 400 International Financial Management

Financial management of a multinational enterprise. Topics include foreign exchange risk, political risk, long-run investment and financing decisions, working capital management and valuation of operations and taxation.

FIN 403 Capital Budgeting

Examines the firm's investment decisions in projects within the context of value creation. Covers investment decision making under certainty and under risk. Certainty equivalent, CAPM and risk adjusted return, sequential decision making and sensitivity models are discussed. Problems and cases are assigned for analysis and class presentation.

Prerequisites: MKT 310 and 320

FIN 410 Taxation I (also listed as ACCT 410)

A study of the U.S. Internal Revenue Code with emphasis on income taxation of individuals. Provides practice in the preparation of tax returns and the solution of case problems. Concentrates on the problems of U.S. individual income tax, but taxation of corporations and partnership is also examined.

Prerequisites: ACCT 211 and 212

FIN 411 Taxation II (also listed as ACCT 411)

A study of the U.S. Internal Revenue Code with emphasis on the taxation of corporations, partnerships, estates and trusts. Federal payroll, gift and estate and New Jersey taxes are also covered.

Prerequisite: FIN 410

FIN 420 Managerial Economics (also listed as ECON 410)

The application of economic analysis to the solution of individual business problems. Among the primary areas covered are demand forecasting, cost and profit analysis and capital budgeting.

Prerequisites: ECON 201, 202, 210 and 211

FIN 435 Principles of Investment

A disciplined application of financial analysis to the valuation and selection of corporate securities for individual as well as institutional investment. The course emphasizes, among other topics, both the fundamental and technical analysis of common stocks in light of the modern portfolio theory.

Prerequisites: ECON 211, MKT 310 and FIN 320

Department of Marketing and **Management Sciences**

Professors: K. H. Kim (chairperson), P. Nayak, L. Podell, V. Wulwick Assistant Professor: S. Mahler

Business Administration

The business administration program enables students to elect a concentration in management or marketing. The program is grounded in liberal studies and provides strong exposure to a variety of disciplines, which allows the student to have maximum flexibility with which to meet the challenges of the current and future job market.

MAJOR REQUIREMENT'S 60 CREDITS

nagement Core	33 credits
Principles of Accounting I	3
Principles of Accounting II	3
Microeconomics	3
Economic Statistics I	3
Corporate Finance	3
Legal Environment of Business	3
Principles of Management	3
Management Information Syste	ems 3
Production and Operations	
Management	3
Business Strategy and Policy	3
Marketing	3
Concentration (management or marketing)	
Additional Requirements	
	Principles of Accounting I Principles of Accounting II Microeconomics Economic Statistics I Corporate Finance Legal Environment of Business Principles of Management Management Information Syste Production and Operations Management Business Strategy and Policy Marketing on (management or marketing)

CONCENTRATIONS

Management		
ECON 211	Economic Statistics II	3
MGT 306	Organizational Behavior and Theory	3
MGT 308	Organizational Development and	
	Design	3
MGT 309	International Management	3
MGT 315	Human Resources and Management	3
MGT 451	Management Planning and Control	3
MGT 480	Seminar in Management	3
Marketing		
Marketing ECON 211	Economic Statistics II	3
U	Economic Statistics II International Management	3 3
ECON 211		v
ECON 211 MGT 309	International Management	v
ECON 211 MGT 309	International Management Transportation and Business	3
ECON 211 MGT 309 MGT 475	International Management Transportation and Business Logistics	3 3
ECON 211 MGT 309 MGT 475 MKT 314	International Management Transportation and Business Logistics Advertising	3 3 3
ECON 211 MGT 309 MGT 475 MKT 314 MKT 316	International Management Transportation and Business Logistics Advertising International Marketing	3 3 3 3

COURSES

Unless otherwise noted, all courses are for 3 credits.

MGT 300 Principles of Management

Introduces basic principles, policies, problems and successful methods of business organization and management. Emphasizes management's ability to analyze, plan, coordinate and control the varied activities of production, personnel, finance and marketing. Also examines social responsibility and environmental factors affecting business policy and operation.

Prerequisites: ECON 201, 202, ACCT 211 and 212

MGT 301 Personnel Management

Focuses on how to select and train personnel and how to develop and maintain a positive human-relations environment which contributes to the efficiency of the business operation.

Prerequisite: MGT 300

MGT 305 Management Information Systems

Provides methodology of the design, analysis and evaluation of management information systems. Topics include organizational implications of information technology, planning and control systems, implementation of an integrated system, technical treatment of MIS management and application of computers via microcomputer packages in business environments.

Prerequisites: CS 201 and MGT 300

MGT 306 Organizational Behavior and Theory

Stresses the importance of managerial adaptability when dealing with the situational realities of contemporary organizations. Present needs, flexibility and future growth potential are emphasized. Students learn by discussing actual situations and developing solutions based on their knowledge of the theoretical foundations of organizational philosophy, concepts and processes.

Prerequisite: MGT 300 and 301

MGT 308 Organizational Development and Design Conceptual models are discussed, case studies of successful and organizational development efforts are analyzed and current topics in the area are critically reviewed. Appropriate roles for organizational change agents are stressed. Specifically, techniques for introducing and successfully managing change in complex organizations are emphasized.

Prerequisites: MGT 300 and 306

MGT 309 International Management

A framework for the analysis of international management problems. Defines the nature of the international, multinational and transnational company. Also examines the evolution of these types of enterprises, develops a model of a multinational firm in a dynamic global setting and provides a bridge among the disciplines of economics, sociology, political science and international management.

Prerequisites: MGT 300 and MKT 310

MANAGEMENT

MKT 310 Marketing

Major emphasis on techniques for solving business problems, the development of marketing policies and the sale of consumer and industrial products. Various marketing decisions are examined with respect to product-planning, channels of distribution, promotion activity, selling and sales management, pricing and international marketing. Prerequisite: MGT 300

MKT 314 Advertising

The dynamic role played by advertising in the American economy. Examines the function of the corporate advertising department in manufacturing and retailing firms, as well as the advertising agency itself.

Prerequisites: MGT 300 and MKT 310

MGT 315 Human Resources and Management

Includes human resource planning process techniques, operations, goals, objectives, targets, long-range planning, micro- and macroenvironmental and manpower analysis, planning methods, strategies, career planning, development concepts and methods and other aspects of human resources planning and development.

Prerequisites: MGT 300 and 306

MKT 316 Multinational Marketing

A comprehensive examination of the problems and opportunities of international marketing. Provides for indepth study of international marketing decision requirements, including strategic planning, cultural analysis and other related topics.

Prerequisites: MGT 300, 309 and MKT 310

MGT 340 Labor and Management in the American Economy (also listed as ECON 340)

An examination of how labor and management are affected by various theories and institutional approaches and policies, such as public legislation on labor and management relations, collective bargaining, labor unions, inflation and unemployment.

Prerequisites: ECON 201 and 202

MKT 342 Retail Marketing: Merchandise Management

The dynamic role played by retailing in the American economy. Analyzes the problems of marketing consumer goods and services and operating various types of stores. Strategies of forecasting, planning, organizing and controlling retail operations are also considered. Prerequisites: MGT 300 and MKT 310

MKT 430 Product Planning and Management

Emphasizes the importance of product planning and development of new products for the growth and survival of business organizations. Particular emphasis is on product development, the management of new product strategies and the planning and management of the entire product mix in the multiproduct organization.

Prerequisites: MKT 310, FIN 320 and MGT 300

MGT 431 Production and Operations Management

Techniques and methods employed by managers to plan and control manufacturing and other operating systems are emphasized. Application of quantitative methods and various analytical techniques are stressed for operating system design, planning, control, problem solutions, productivity, inventory, scheduling, quality and capacity management, control system development, new technology evaluation and transportation problems.

Prerequisites: ECON 210, 211 and MGT 300

MGT 450 Small Business Management

A senior-level seminar course in the practical aspects of designing and operating a small business firm. Urban and inner-city minority group and poverty problems are highlighted where appropriate.

Prerequisites: MGT 300 and MKT 310

MGT 451 Management Planning and Control

The design and testing of management systems are explored. Analysis of analytical and simulation methods used in planning and controlling different management systems configurations are examined and the behavioral and systems approaches are integrated. Concepts of planning and control are introduced along with situational activities, case studies, perceptual exercises, role playing, competency planning and control activities.

Prerequisites: MGT 300, 306, MKT 310 and FIN 320

MGT 460 Business Strategy and Policy

A case study approach to business decision making that integrates functional and organizational disciplines. Examines, in depth, a series of complex industrial situations to determine in each instance the strategy and policies a firm should follow for its long-run survival. Prerequisites: MGT 300, 306, MKT 310 and FIN 320

MKT 465 Marketing Research

Marketing research as a tool of marketing management, emphasizing the role of research in planning, organizing and controlling marketing activities. Various analytical tools for marketing research are examined and their application to practical marketing problems is illustrated. Prerequisites: MKT 310, MGT 300, ECON 210 and 211

MGT 470 Introduction to Operations Research

The scientific methodology of operations research and logic is applied to the decision making process. Introduces the concepts of linear and mathematical programming and inventory and statistical decision theories. Prerequisites: ECON 211, MGT 300 and MATH 150 or higher

MKT 475 Transportation and Business Logistics Management

Covers the theory, techniques and management of physical supply and distribution. Emphasis is placed on organization, route structure, equipment management, scheduling, control operations, inventory management, and other macro- and micrologistics. Students must deal with government regulations, industry trends and relations, technological development and corporate strategy. Prerequisites: MKT 310 and MGT 300

MGT 480 Seminar in Management

Explores, in depth, selected theoretical aspects of management theories and/or the major areas within management. Each student is expected to take a major area and prepare a paper that may include decision-making processes, strategy formulation, perceptions of environmental factors, managerial values, organizational crises and other current management topics. Students have the opportunity to write a paper based on their studies of real-world situations.

Prerequisites: MGT 300, 460, MKT 310 and FIN 320

MKT 499 Independent Study

MGT 499 Independent Study

The Honors Program in International Management

The honors program in international management offers students the opportunity to combine pre-professional education in business administration with the internationalist perspective of the liberal arts.

The program's major goals are: (1) to prepare students for careers and for further study in international economic and business affairs, with specific attention to East Asian, European and Latin American areas; (2) to associate the concept of honors with both an intercultural perspective and second language proficiency; (3) to promote the concept that the well-prepared manager is a Renaissance person whose education encompasses a broad range of academic studies.

Students achieve an understanding of both economics and business administration in an international context and a comprehensive knowledge of a given world area its language, history, politics and ethnology. While curriculum models vary according to the honors candidate's major (economics, accounting, business administration, political science, history, geography, sociology or foreign languages), the choice of area studies determines the combination of language and area study courses.

School of Management Core 33		33 credits
ACCT 211	Principles of Accounting I	3
ACCT 212	Principles of Accounting II*	3
ECON 202	Microeconomics	3
ECON 210	Economic Statistics I*	3
FIN 320	Corporate Finance*	3
LAW 201	Legal Environment of Business	3
MGT 300	Principles of Management*	3
MGT 305	Management Information System	ıs* 3
MGT 431	Production and Operations	
	Management*	3
MGT 460	Business Strategy and Policy*	3
MKT 310	Marketing*	3
Program Courses 21		21 credits
HPIM 213	Sophomore Honors Colloquium	1
ECON 211	Economic Statistics II	3
ECON 370	International Economics	3
ECON 390	Comparative Economic Systems	3
FIN 400	International Financial Managem	ient 3
MGT 309	International Management	3
MKT 399	International Marketing	3
HPIM 480	Senior Seminar	2

Additional Requirements 9 credits By advisement from the School of Management.

Area Study Requirements9 creditsArea history (Europe, Far East, Latin Americas)3Area political science (Europe, Far East, Latin Americas)3Area geography (Europe, Far East, Latin Americas)3

*Course has prerequisite; please consult catalog.

Additional Courses Offered by the School

Unless otherwise noted, all courses are for 3 credits.

CJA 160 Introduction to Criminal Justice Systems Overview and survey of the criminal justice system in American society, philosophical and historical background of system agencies and processes, administration of agencies and consideration of technical problems, crime and the criminal as social and public safety problems.

CJA 161 Law Enforcement Organization and Administration

Introduction to concepts and guidelines provided by organizational theory as they are applicable to police organizational structure. Discussion of administrative problems, lines of communication and responsibility, coordination among various branches, recruitment, career advancement and selection of police leadership. Prerequisite: CJA 160

CJA 203 Community Relations

Examines the attitudes and behaviors of criminal justice personnel and the public which contribute to positive and/or negative relationships between the two. Focuses on public apathy and law enforcement, changing nature of social control and cases and situations in criminal justice community relations. Explores ways to stimulate beneficial relationships and a sense of dialogue between community residents and criminal justice agencies. The class setting serves as a laboratory in which a sense of community among students is fostered.

Prerequisite: CJA 160

CJA 207 Introduction to Criminology

Analyzes the definition(s) of crime, official and unofficial measures of criminal behavior in society, the variety of theoretical explanations of crime (classical theory, positivism, anomie, opportunity theory, delinquent subculture, differential association and labeling theory, among others), discusses types of criminal behavior systems—violent crime, professional crime, organized crime, white-collar crime, victimless crimes, etc. Prerequisite: CJA 160

CJA 301 Supervision in Criminal Justice

Considers supervisory problems within criminal justice organizations and the attainment of effective performance through an informed combination of valid principles of human relations and supervisory techniques. Such topics as leadership, motivation, discipline, instructional training and other techniques important to the attainment of organizational goals and objectives are included. Prerequisite: CJA 160

MANAGEMENT

CJA 302 Criminal Justice Planning

The role of research—data collection and analysis—in the development of systematic responses to crime, delinquency and other social problems by criminal justice agencies. Includes data collection techniques, such as questionnaires, interviews, measurement scales; also includes techniques of statistical data analysis (measures of central tendency, dispersion, correlation and regression, etc.).

Prerequisite: CJA 160

CJA 303 Juvenile Delinquency

Examines the nature, variation and causes of juvenile delinquency. The course is concerned with the definition of juvenile delinquency, measures of delinquent behavior, the special status and problems of the juvenile court, as well as other agencies which make up the juvenile justice system. Theoretical explanations of juvenile delinquency, including individualistic theories and group-oriented theories.

Prerequisite: CJA 160

CJA 309 Social Problems in Criminal Justice

A systematic, in-depth study of social problems as they bear on the structure and functioning of the criminal justice system. Research and theory in such areas as poverty, racism, sexism, violence, etc.

Prerequisite: CJA 160

CJA 310 Comparative Criminal Justice Systems

A comparative analysis of criminal justice systems in the United States and selected foreign countries. Provides comparisons and contrasts in terms of their structures, administration and organizational aspects, as well as functions and processes. Relations between the criminal justice system and the communities they serve are examined. Prerequisites: CJA 160 and 161

CJA 406 Law Enforcement Management

Analysis of management techniques in the areas of criminal justice personnel management, planning, program budgeting, records management, data processing, communications, leadership and decision making. Concepts developed in the area of private sector management are applied to public sector criminal justice agencies. Prerequisites: CJA 160 and 161

CJA 480 Seminar in Criminal Justice

This course is designed to provide an integration of the various concepts, topics and problem areas relevant to the contemporary criminal justice system in the United States. Crime prevention and the future of the criminal justice system are considered. Open only to seniors majoring in criminal justice.

Prerequisites: CJA 160, 161, 207 and 302

CJA 499 Independent Study

As approved and to be arranged. 1–3 credits

PPM 211 Introduction to Public Management

Introduces students of public affairs to the methods and practices of managing public agencies. The course surveys organizational theories and practices, including leadership techniques, coordination, planning, supervision, decision making, organizing, supervision, controlling and such other internal and external factors which influence public officials, bureaucratic behavior and governmental processes.

PPM 225 Management of State and Local Public Agencies

A study of the management structure, procedures and policies of state and local government and community agencies. Special emphasis on agency and program development and administration including urban issues, service delivery systems and capacity, intergovernmental and agency relations.

Prerequisite: PPM 211, may be taken concurrently

PPM 230 Introduction to Public Information Systems

The basic concepts and elements of information systems management as applied to the public sector. Topics include methods of information systems implementation, information processing problems and models, systems analysis. Principles and applications in the public sector are stressed.

Prerequisite: CS 201

PPM 265 Introduction to Public Policy Studies

A general introduction to public policymaking as it relates to public administration/management. The course covers the various models of public policymaking including the elite/mass model, the group model, the systems model, the institutionalist/neoinstitutionalist model, the incrementalist model, the rationalist model and the public choice model. The role of policy analysis in administrative institutions and processes is discussed. Prerequisite: PPM 211

PPM 270 Public Policy Implementation

The development and implementation of public policies. Topics include social and urban impact analysis, intergovernmental program management and the role of evaluation research in program implementation. Emphasis on the problematic nature of translating public laws into viable public programs.

Prerequisite: PPM 265

PPM 301 Public Organization Theory and Behavior The theories and principles of organizational behavior are viewed in the context of public policymaking and management. The course examines the nature and evolvement of organizational structures, functioning and behavior of groups and individuals with an emphasis on recent organizational and research trends and findings. Attention is also given research findings concerning group behavior, supervisory behavior, intergroup relations, employee goals and design.

Prerequisite: PPM 211

PPM 311 Theory and Methods of Public Management Research

Examines and contrasts various assumptions, principles and methods employed and applied to the study and conduct of management of public agencies. Focus is on the theoretical and methodological bases of conceptualizing, initiating, planning, implementing and directing public actions and programs within an organizational and behavioral context. The course emphasizes the way in which theories of knowledge about public management are translated into practice.

Prerequisite: PPM 211

PPM 315 Quantitative Methods for Public Policymaking

The course utilizes quantitative concepts, principles and methods in the development and implementation of public policy alternatives. Methodological and evaluation concepts and tools in program development and implementation, quantitative criteria models, monitoring techniques and procedures, impact assessment, benefitcost and cost-effectiveness are also emphasized. Prerequisite: PPM 211

PPM 325 Planning and Planning Processes

Examines and analyzes various principles, theories, patterns and practices of planning in public organizations. Topics include tools and techniques of planning, political and social environment of planning and the impact of technology on the planning process. Prerequisite: PPM 211 and 301

Prefequisite: PPM 211 and 301

PPM 330 Nonprofit Organizations and Management

The number of private, nonprofit corporations continues to grow, and these organizations are coming to have tremendous influence in community development and urban policymaking. This course examines the problems and issues surrounding the management of not-for-profit organizations. Topics include behavior of nonprofit organizational board members, fund raising and the role of nonprofit organizations in community and economic development.

Prerequisite: PPM 211

PPM 365 Program Analysis

Program analysis involved the determination of costs and benefits of alternative program solutions to public problems. This course deals with the fundamental analytical methods and processes of program evaluation and the use of such tools in the policymaking process. The role of program analysis in administrative agencies is also discussed.

Prerequisites: PPM 265 and 315

PPM 370 Ethical Issues of Policymaking

An examination of the ethical provisions, principles and obligations under which public officials conduct themselves and their duties. The nature of normative discourse and reasoning is also discussed. The emphasis is on the moral and ethical criteria used in judging and determining public policies and programs, as well as exercising administrative discretion.

Prerequisite: PPM 265

PPM 411 Public Personnel Systems

Principles, structures and techniques of public personnel systems, organization and development. Topics focus on key sectors of personnel systems: recruitment, selection, training, promotion, classification, evaluation and transfer policies. The impact of public personnel theories and practices on service processes, delivery systems and the political process is also considered. Prerequisites: PPM 211

PPM 415 Public Budgeting and Finance

Describes and analyzes all major aspects of public budgeting and finance at all levels of government, including budget preparation, budget documentation, accounting, current and capital budgeting, debt management, public purchasing and control mechanisms of pre- and postaudits.

Prerequisite: PPM 211. Two courses in economics and one course in accounting recommended.

PPM 430 State and Local Government Finance

Problems and issues of budgeting and finance peculiar to state and local governments. Topics include financing local governments, capital budgeting and programming, property taxes, procurement, local governmental debt policy and state supervision of local governmental finance.

Prerequisite: PPM 415

PPM 439 Internship: Management of State, Local and Community Agencies

Designed to provide practical work experience in a student's area of specialization in public administration. Prerequisites: PPM 265, 301 and 311

PPM 465 Applied Public Policy Research

Students integrate the skills and tools of policy analysis derived from previous course work. Real-world examples are stressed.

Prerequisites: PPM 265, 301 and 315

PPM 479 Internship: Public Policy Studies

Students work in their areas of specialization under the direction of experienced public officials.

Prerequisites: PPM 265, 301 and 315

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School of Science and Mathematics

School of Science and Mathematics

Robert L. Simpson, Dean Office: Science Hall 317

The School of Science and Mathematics offers degree programs in biology, chemistry, environmental studies (in conjunction with various other majors) and mathematics for students wishing to pursue careers in these disciplines, including teaching. The School of Science and Mathematics also offers a degree in liberal studies for students who wish to pursue a directed course of study integrating the offerings of the disciplines represented within the school.

The school offers diverse liberal studies courses for students who are majoring in other schools of the College. The woods, pond, waterfall and undeveloped parts of the campus are used for studies in ecology, biology, geology and for surveying practice in environmental mapping.

Seminars by prominent scientists, given throughout the year, keep students and faculty abreast of recent research and developments in the sciences. Each department has a faculty active in research who regularly provide opportunities for students to engage in research under their supervision. Modern scientific equipment and supplies support both researchers and students.

Center for Applied Science

The school was a recent recipient of a \$3.1 million Challenge to Excellence grant by the state to strengthen further its curriculum and facilities, ensuring student exposure to rapidly developing areas including biotechnology, biochemistry, environmental science and applied mathematics. The school has established the Center for Applied Science to focus the school's teaching and research in these emerging areas.

Pre-Professional Programs

All students planning to attend professional school must have an interview with the Pre-Professional Committee and provide the committee with a brief résumé of curricular and extracurricular activities. It is suggested that these interviews take place in spring of the junior year.

The Pre-Professional Committee sends out letters to schools designated by the student at the end of the junior year or at the beginning of the senior year. The letter reflects the student's college grade point average, performance in science courses and an assessment of the ability to compete in the chosen field. The student is rated in comparison to other students in biology and chemistry. This indicates to a professional school the likelihood of a student's success in a program. All students should realize that pre-professional programs are very competitive, and students should have alternate plans.

Pre-Medical Preparation Prospective medical students should acquaint themselves with entrance requirements for medical schools by consulting the handbook published annually by the Association of American Medical Colleges, Admission Requirements of American Medical *Colleges.* They should read the most recent issue to make sure that the requirements of the schools to which they plan to apply have not changed and are advised to purchase the publication by mail from the Association at 1 DuPont Circle, N.W., Washington, D.C. 20036.

All medical school applicants are required to take the Medical College Admissions Test, administered twice a year, fall and spring, by the American College Testing Service. Students may obtain information by writing to MCATS, Box 414, Iowa City, Iowa 52240. Students may obtain MCAT applications from the pre-professional advisor.

Students should take at least 8 credits in each of the following course areas in order to meet the minimum requirements for the majority of medical schools: general biology; general chemistry, calculus, organic chemistry and physics. Strongly recommended are courses in English literature, foreign languages and advanced science.

Students are advised to elect as many of the required courses in science as possible in their freshman and sophomore years. Pre-medical students must have their course of study approved by the pre-professional advisor of the School of Science and Mathematics.

Pre-Dental Preparation Admission requirements to dental schools are set by the American Dental Association. Minimum requirements are similar to the pre-med requirements listed above. Pre-dental students must have their courses approved by the pre-professional advisor of the School of Science and Mathematics and should take the Dental College Admissions Test during the junior or senior year.

Veterinary Medicine Preparation Prospective veterinary students should acquaint themselves with the entrance requirements for veterinary schools by consulting the handbook published annually by the American Veterinary Medicine Association or the catalogs of specific veterinary colleges. Because requirements change, it is important to check requirements annually. All students must take the Veterinary College Admissions Test or the GRE, whichever is required by the individual school.

The state of New Jersey has agreements with the following veterinarian schools to accept students who are New Jersey residents: Cornell University, University of Kansas, University of Ohio and University of Pennsylvania.

Minimum requirements are biology or zoology, 8 credits; chemistry, including organic and biochemistry, 16 credits; math, including some analytic geometry and calculus, 6 credits; physics, 8 credits; microbiology, 3 credits; genetics, 3 credits; English, 6 credits. There is a requirement for farm work or work with a veterinarian.

Required courses should be taken as early as possible, and the course of study should be approved by the preprofessional advisor of the School of Science and Mathematics as early as possible.

Liberal Studies Major

Students interested in several disciplines offered by the School of Science and Mathematics, but not wishing to

major in any particular one, may pursue the liberal studies major and earn a bachelor of science degree in liberal studies.

In this option, students, with the assistance of an academic advisor, select courses totaling 50 credits from at least three of the school's majors, taking no more than 18 credits in any one of them.

Honors Program in Biopsychology

Professors: J. Green, M. Hahn, D. Vardiman Associate Professors: R. Benno, D. Desroches

The honors program in biopsychology draws on discoveries in such fields as behavioral genetics, neuroanatomy, brain chemistry, neurophysiology, psychopharmacology and many others to unravel the biology of the mind and behavior. The National Science Foundation awarded two grants to support the development of this program. As with all honors programs at WPC, biopsychology is not a major but a distinctive cluster of courses which adds breadth to, and reinforces, students' chosen majors.

Open to majors in psychology, biology, chemistry, sociology and nursing, this program is highly recommended for students planning graduate study—including premedical/dental/veterinary/graduate nursing students and, in general, those students interested in clinical or research careers. As an honors program, biopsychology is designed for highly motivated individuals seeking opportunities both to learn and to demonstrate excellence.

Interested students begin in the freshman year with a set of foundation courses carefully selected to provide a firm basis for the study of more advanced disciplines. Students begin taking the core biopsychology courses in the junior year. The curriculum is enriched with seminars, discussion groups, research opportunities and speaker series. Students and faculty participate together in a closely knit academic community.

FOUNDATIO	N COURSES	25-46 CREDIT	ГS
Biology			
BIO 163-164	General Biology I and II		8
or			
BIO 112113	General Anatomy and Ph	ysiology	
	I and II		8
or			
BIO 114	Applied Anatomy and Phy	/siology	4
Chemistry			
CHEM 160-			
161	General Chemistry I and	II	8
and			
CHEM 308-			
309	Organic Chemistry I and	II	8
or			
	College Chemistry and C	organic	
165	Biochemistry		8
Computer Sc			
CS 130	Introduction to Compute	r	_
	Programming/BASIC		3
or			
CS 235	Introduction to FORTRAN	N	3
or			

MATH 232 or	Statistical Computing	3
PSY 208	Computer Applications of Stati in Psychology	stics 3
Physics		
Choose one o	of the following by advisement (r	not required
of nursing stu	udents):	
PHYS 255-		
256	College Physics I and II	8
or		
PHYS 260-		
261	General Physics I and II	8
or		
PHYS 110	Introduction to Physics	4
Psychology		
PSY 110	General Psychology	3
Statistics		
MATH 230	Statistics I	3
or		
PSY 202		
203	Experimental Psychology I and	II 8
CORE COUR	SES	4 CREDITS
BIPY 474	Neuroscience	4
BIPY 475		4
PSY 353	Physiological Psychology	3
	Topical Elective in biopsycholo	gy

*Choose from sociobiology, psychopharmacology, biorhythms in physiology and behavior and special current topics as announced.

(one or more)*

COURSES

Unless otherwise noted, all courses are for 3 credits.

BIPY 474 Neuroscience

A study of the brain, specifically the integrated roles of the anatomy, chemistry, histology and electrical activity of the central nervous system. The laboratory component focuses on anatomy and techniques for the study of brain functioning.

Prerequisites:BIO 163–164,112–113 or 114 and one year of chemistry and one semester of psychology.

4 credits Lecture and lab

BIPY 475 Behavior Genetics

An introduction to the concept of gene-environment interaction as a determiner of both animal and human behavior. Exposure to various methods of experimental and correlational types of investigation.

Prerequisites: BIO 163–164,112–113 or 114 and one year of chemistry and one semester of psychology. 4 credits

Lecture and lab

BIPY 476 Developmental Biopsychology

Designed to introduce students to the scope and methods of a psychobiological approach to development. Stresses the phylogenetic and ontogenetic processes influencing individuals, groups, species and phyla, with special emphasis on human groups.

Prerequisites: PSY 353, BIO 163-164, 112-113 or 114

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SCIENCE AND MATHEMATICS

BIPY 479 Biorhythms in Physiology and Behavior Focuses on the role of biological rhythms in the adaptive functioning of organisms. Examines yearly, monthly, tidal, daily and sleep/dream cycles; the nature and control of internal clock mechanisms and the implications of biorhythms for illness and psychopathology. Prerequisites: BIO 163–164, 112–113 or 114

PSY 353 Physiological Psychology

Explores the interrelationships between the physiology of the nervous system and psychological functions such as perception, voluntary movement, sexual behavior, motivation, emotion, memory and learning.

Prerequisites: PSY 110 and BIO 114 or equivalent

Department of Biology

Professors: R. Callahan, M. Hahn, C. Y. Hu, D. Levine, J. Rosengren, A. Shinn, R. Simpson, J. Voos, E. Wallace (chairperson), D. Weisbrot, J. Werth

Associate Professors: R. Benno, R. Chesney, D. Desroches, N. Grant, S. Hanks, A. Isaacson, O. Newton, M. Sebetich Assistant Professors: E. Gardner, M. Wahrman

The Department of Biology offers a major program leading to a bachelor of science in biology, a minor in biology and provides a wide scope of biology electives and service courses for students from other disciplines. To meet the needs of modern biologists, the department has established a curriculum that provides broad, basic training in the fundamentals of biology.

Interested students may inquire about the honors program in biopsychology offered jointly by the Schools of Science and Mathematics and Social Science.

Certification is available for students interested in teaching science on the secondary level. Interested students should follow the certification requirements outlined ahead.

BIOLOGY M	AJOR REQUIREMENTS	34-37 CREDITS
BIO 163	General Biology I	4
BIO 164	General Biology II*	4
BIO 205	Cell Biology	4
BIO 206	General Genetics	4
	Plant course (see list)	4
	Animal course (see list)	3-4
BIO 480	Biology Seminar	2
or		
BIO 499	Independent Study	1–3
Electives 10–12 credits		
Three major elective courses by advisement (see list)		

PSY 415 Psychopharmacology

Focuses on the major classes of drugs which alter brain and psychological functioning. Examines and compares the mechanisms by which these drugs affect the brain. The psychopharmacology of pain, anxiety, depression and schizophrenia are included.

Prerequisites: BIO 163-164, 112-113, 114 or PSY 353

COREQUIREMENTS		31-32 CREDITS
Chemistry		8–9 credits
CHEM 160/		
061	General Chemistry I	4
CHEM 161/		
061	General Chemistry II	4
CHEM 308/		
008	Organic Chemistry I	4
CHEM 309/		
009	Organic Chemistry II	4
Mathematics		7–8 credits
MATH 160–		
161	Calculus I and II	8
or		
MATH 160	Calculus I	. 4
MATH 230	Statistics	.3
Physics		8 credits
PHYS 255-		
256	College Physics I and II	8
or		
PHYS 260-		
261	General Physics I and II	8

*Students may be exempt from taking the General Biology II (BIO 164) based on the results of the placement examination offered by the Biology Department. These credits must be replaced by an upper-level biology course from the major elective list. The placement examination is given during the fall semester.

Plant List		
BIO 261	General Botany	4
Animal List		
BIO 112	General Anatomy and Physiology I ⁺	4
BIO 113	General Anatomy and Physiology II ⁺	4
BIO 218	Invertebrate Zoology	4
BIO 350	Animal Behavior	3
BIO 405	Comparative Vertebrate Anatomy	4
BIO 416	Comparative Animal Physiology	4
BIO 421	Developmental Biology	4

Major Elective Course List

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BIO 112	General Anatomy and Physiology I*	4
BIO 113	General Anatomy and Physiology II ⁺	4
BIO 218	Invertebrate Zoology	4
BIO 303	Plant Anatomy	4
BIO 304	Plant Physiology	4
BIO 320	General Bacteriology	4
BIO 340	General Ecology	4
BIO 350	Animal Behavior	3
BIO 402	Aquatic Ecology	4
BIO 405	Comparative Vertebrate Anatomy	4
BIO 416	Comparative Animal Physiology	4
BIO 417	Histology	4
BIO 421	Developmental Biology	4
BIO 444	Evolution	3
BIO 450	Molecular Genetics	3
BIPY 474	Neuroscience	4
BIPY 475	Behavior Genetics	4
BIO 484	Scanning Electron Microscopy	4
BIO 485	Transmission Electron Microscopy	4
CHEM 327	Biochemistry	4

Note: Junior and senior biology majors may take graduate biology courses at the 500-level with the permission of the instructor and the Biology Department chairperson.

*BIO 112 and 113, General Anatomy and Physiology I and II, to be allowed as major courses by permission of the Biology Department chairperson. These courses are for students interested in certain health related fields, such as physical therapy or chiropractic study.

MINOR REQUIREMENTS		18-20 CREDITS
BIO 163	General Biology I	4
BIO 164	General Biology II	4
Plus three additional biology courses at least one of which		

Plus three additional biology courses, at least one of which must include a laboratory, by advisement.

Note: Students who wish to minor in biology are strongly urged to include in their background a basic course in statistics and one year of general chemistry.

CERTIFICATION REQUIREMENTS **27 CREDITS** Students interested in obtaining teacher certification in comprehensive science must complete secondary education (K-12) requirements (see Department of Curriculum and Instruction).

COURSES

Unless otherwise noted, all courses are for 4 credits.

BIO 112-113 General Anatomy and Physiology I and II

A study of the structural and functional relationships of the human body. First semester: detailed study of the individual organism, cell functions, histology, integumentary, skeletal, muscular, respiratory and circulatory systems. First-semester laboratory: dissection of the cat, human skeleton. Second semester: nervous, endocrine, reproductive, digestive and urinary systems; metabolism, acid-base balance and water and electrolyte balance. Open to all; required of nursing and allied health majors. Lecture and lab

Prerequisite: BIO 112 for BIO 113

BIO 114 Applied Anatomy and Physiology

A study of human anatomy and physiology with emphasis on developing an understanding of the interrelationships of the body systems in maintaining homeostasis in both health and disease. Emphasis on nervous and endocrine control mechanisms and the muscular and respiratory systems. Required of psychology, speech pathology and special education majors; open to others. Not recommended for biology majors.

Lecture and lab

BIO 118 Basic Anatomy and Physiology

A study of the anatomy and physiology of the human organism showing relationships between structure and function, the integration of the various systems and maintenance of homeostasis. Open to all; required of movement science majors. Not recommended for biology majors.

Lecture and lab

BIO 120 Human Biology

Accent on human structure, function and behavior; genetic makeup and hereditary potential; evolutionary history. Laboratory includes the dissection of the fetal pig as an example of mammalian anatomy, as well as varied exercises in human physiology, genetics and evolution. Not recommended for biology majors. Lecture and lab

Field Biology BIO 130

An introduction to plants and animals of New Jersey. Intended to develop ability to recognize biotic groups and increase understanding of the necessity of harmonious relationships among people, plants and animals. Not open to majors.

Lecture and field laboratory

BIO 163-164 General Biology I and II

For students intending to major in biology, provides a background in biological principles. Similarities and differences between living organisms, both plant and animal, are discussed. Biology I: Subcelluar and cellular structure and function, cellular respiration, photosynthesis and protein synthesis. Biology II: The underlying principles of whole organism structure and function; principles of evolution and ecology.

Prerequisite: BIO 163 for BIO 164 Lecture and lab

SCIENCE AND MATHEMATICS

BIO 170 Basic Microbiology

Structure, function, nutrition and physiology of the various groups of microorganisms. Relationship to environment and other organisms and their medical importance are considered, particularly infectious disease and immunity. Required for nursing majors; open to others; not open to biology majors.

Lecture and lab

BIO 205 Cell Biology

A study of the physiological and biochemical processes that regulate and maintain cell function. Cellular and subcellular structures are discussed, especially as applicable to cell function.

Prerequisites: BIO 163 and CHEM 161 Lecture and lab

BIO 206 General Genetics

A study of the organization, function, regulation and transfer of hereditary material in viruses, bacteria and eukaryotes, including man. Prerequisites: BIO 163–164

Lecture and lab

BIO 218 Invertebrate Zoology

The study of invertebrate animals which make up 98 percent of all animal species. Special emphasis on ecology, habitat, economic importance and special structures which make the animals competitive in our world. Field trips augment lectures and laboratories. Prerequisite: BIO 164

Lecture and lab

BIO 261 General Botany

An introduction to the biology of the plant kingdom; structural, functional, economical, ecological and evolutionary aspects of plants.

Prerequisites: BIO 163–164 Lecture and lab

BIO 302 Human Genetics

Basic tenets of genetics; includes the organization, function and regulation of hereditary material with emphasis on human and medical application. Not open to biology majors.

Prerequisites: BIO 113

Lecture only-For nursing and community health majors

BIO 303 Plant Anatomy

A comparative study of the relationship of phylogeny, ontogeny and ecology to the anatomical and morphological variations among vascular plants.

Prerequisite: BIO 261 Lecture and lab

Lecture and lab

BIO 304 Plant Physiology

Fundamental principles of plant physiology with emphasis on growth and development of vascular plants, including experimental embryogenesis, seed germination, growth regulators, plant-water relations, juvenility, flowering, dormancy and environmental physiology. Prerequisite: BIO 261

Lecture and lab

BIO 312 Advanced Anatomy and Physiology

Advanced studies in human physiology. Emphasis on cardiology, circulation, respiration, acid-base balance, water balance and disorders of the nervous system. For nursing majors; open to others with some physiology background; not open to biology majors.

Prerequisites: BIO 113 and one year of chemistry Lecture and lab

BIO 320 General Bacteriology

This course is concerned with the structure and function of microorganisms with emphasis on bacteria and viruses. The cultivation of microorganisms, microbial metabolism, ecology, immunology and virology are discussed.

Prerequisites: One year of biology and one year of chemistry

Lecture and lab

BIO 340 General Ecology

Basic structural and functional aspects of our ecosystem, including detailed study at the community, population and organismal levels.

Prerequisites: Two years of biology and one year of chemistry

Lecture and lab

BIO 350 Animal Behavior

A survey of animal behavior, including physiological aspects and ecological and adaptive implications. Prerequisites: Two semesters of science 3 credits

Lecture only

BIO 352 Plants for People

Explores the importance of plants and plant products in terms of food, clothing, shelter and medicines, as well as their aesthetic value to humankind.

Prerequisite: BIO 130 or 163 3 credits

Lecture only

BIO 402 Aquatic Ecology

A critical examination of the ecology of fresh water biota with special attention to the physical features of the environment. Surveys are made of streams, ponds and lakes in the environs. Three all-day field trips included. Prerequisite: BIO 340 or permission of the instructor Lecture and field laboratory

BIO 405 Comparative Vertebrate Anatomy

The phylogenic history of each chordate system, including integument, skeleton, muscles, digestive tract, circulatory, excretory, respiratory, nervous and reproductive systems. Laboratory includes dissection of representative chordates (lamprey, shark, necturus, cat).

Prerequisites: Two years of biology and one year of chemistry

Lecture and lab

BIO 416 Comparative Animal Physiology

A comparative approach to the basic physiological processes of animals. Emphasis on the functional modifications animals develop in order to cope with their environment.

Prerequisites: Two years of biology and CHEM 309 Lecture and lab

BIO 417 Histology

The microscopic anatomy, organization and function of normal mammalian tissues. Study of tissues and organs by light microscopy comprises the laboratory component of the course.

Prerequisites: Two years of biology and one year of chemistry

Lecture and lab

BIO 421 Developmental Biology

The study of embryonic change in living organisms. Cellular and biochemical mechanisms which account for the emergence of form in embryos and regenerating tissues are explored. A broad range of organisms are considered. Both living and preserved embryos are studied in the laboratory.

Prerequisite: 206 and one year of chemistry Lecture and lab

BIO 444 Evolution

The history of evolutionary theory, heredity, populations, classification, speciation, adaptation, evidence for organic evolution, vertebrate and human evolution and the problem of human population.

Prerequisites: Two years of biology, including BIO 206 3 credits

Lecture only

BIO 480 Biology Seminar

Restricted to biology majors. The course requires each student to do an in-depth study of a selected topic with an evolutionary theme. The work requires library research and preparation of both a written and an oral presentation of that work, including details of research procedures where applicable. Students are expected to read and discuss each other's presentations.

Prerequisite: 20 credits of biology 2 credits

BIO 484 Scanning Electron Microscopy

Theory and functioning of the SEM. Each student is required to carry out a project.

Prerequisites: Two years of biology and one year of chemistry

Lecture and lab

BIO 485 Transmission Electron Microscopy

The principles and practice of transmission electron microscopy, including theory, electron optics, specimen preparation, operation of electron microscope, photography, related instruments and techniques.

Prerequisites: Two years of biology and one year of chemistry

Lecture and lab

BIO 497 Readings in Biology

Student studies a particular field of biology under the personal direction of a faculty member. See also courses listed under Honors Program in Biopsychology. Prerequisite: Permission of the chairperson 1–3 credits

BIO 498 Field Experience in Biology

A supervised educational experience outside of the regular departmental program. Pass/fail course. Prerequisite: Permission of the chairperson 1–3 credits

BIO 499 Independent Study

Individual research projects under the direction of a faculty member. May be substituted for BIO 480. Prerequisite: Permission of the chairperson 1–3 credits

Department of Chemistry, Physics and Environmental Science

Chemistry

Professors: C. W. Lee, A. Merijanian, G. Sharma, A. Speert Associate Professors: G. Gerardi (chairperson), R. McCallum, L. J. Rivela Assistant Professor: S. Raj

B.S. in Chemistry

The chemistry program is designed to provide students the scientific knowledge and skills necessary to pursue a broad range of professional careers. The program leads to a B.S. degree and is certified by the American Chemical Society as meeting all the professional standards required for baccalaureate education in chemistry. A student is required to take major courses in the principal branches of chemistry: analytical, biochemistry, inorganic, organic and physical, in addition to directed electives in mathematics, physics, computer science, biology and English.

With a bachelor's degree in chemistry, a student is prepared to continue his or her education by enrolling in graduate programs in chemistry or other sciences, professional school programs (medicine, dentistry, osteopathy, podiatry, etc.), engineering, computer science, business administration and law. Entry-level positions in government, teaching and industry, which involve aspects of research, manufacturing, sales and management, are also immediate career options.

B.S. in Chemistry (American Chemical Society Certified)

Society Certifica)			
MAJOR REQUIREMENTS			
(LECTURE A	ND LAB) 51	-53 CREDITS	
CHEM 160	General Chemistry I	4	
CHEM 161	General Chemistry II	4	
CHEM 201	Analytical Chemistry	5	
CHEM 308	Organic Chemistry I	4	
CHEM 309	Organic Chemistry II	4	
CHEM 311	Physical Chemistry I	4	
CHEM 312	Physical Chemistry II	5	
CHEM 320	Inorganic Chemistry	4	
CHEM 327	Biochemistry I	4	
CHEM 401	Analytical Instrumentation	4	
CHEM 426	Organic Spectroscopy	4	
	Advanced chemistry elective	s	
	(select two courses)	4-6	
CHEM 480	Seminar in Chemistry*	1	
DIRECTED	ELECTIVES	18 CREDITS	
CS 130	Introduction to Computer		
	Programming/BASIC	3	
ENG 300	Technical Writing	3	
or			
ENG 330	Critical Writing	3	
MATH 160	Calculus I	4	
MATH 161	Calculus II	4	

MATH 160	Calculus I	4
MATH 161	Calculus II	4
MATH 201	Calculus III	4
PHYS 260	General Physics I	4
PHYS 261	General Physics II	4
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ADVANCED CHEMISTRY
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ELECTIVES	4-6	CREDITS
CHEM 312 is	a corequisite for each of the follo	wing. Two
courses are r	required.	
CHEM 321	Advanced Inorganic Chemistry	3
CHEM 403	Physical Chemistry III	3
CHEM 421	Advanced Organic Chemistry	3
CHEM 499	Independent Study	1-3

Course Sequence/ACS Certified Program FRESHMAN YEAR

First Semester

riist semester			
BIO 163	General Biology I	4	
CHEM 160	General Chemistry I	4	
ENG 110	Writing Effective Prose	3	
MATH 160	Calculus I	4	
Second Sem	Second Semester		
CHEM 161	General Chemistry II	4	
CS 130	Introduction to Computer		
	Programming/BASIC	3	
MATH 161	Calculus II	4	
	General education course	3	

SOPHOMORE YEAR

First Semester		
CHEM 201	Analytical Chemistry	5
CHEM 308	Organic Chemistry I	4
PHYS 260	General Physics I	4
	General education course	3

Second Semester

second seme		
CHEM 309	Organic Chemistry II	4
MATH 201	Calculus III	4
PHYS 261	General Physics II	4
	General education course	3
JUNIOR YEA	R	
First Semeste	er	
CHEM 311	Physical Chemistry I	4
CHEM 327	Biochemistry I	4
ENG 300	Technical Writing	3
	General education course	3-4
Second Seme	ester	
CHEM 312	Physical Chemistry II	5
CHEM 320	Inorganic Chemistry	4
	General education course	6
SENIOR YEA	AR	
First Semeste	er	
CHEM 426	Organic Spectroscopy	4
011201 120	Advanced chemistry elective	3-4
	Chemistry and free electives	8
Second Sem	•	Ū
CHEM 401	Analytical Instrumentation	4
CHEM 480	Seminar in Chemistry	1
	Chemistry and free electives	9
B.S. in Che	emistry	
MAJOR REQ		
(LECTURE A		43 CREDITS
CHEM 160	General Chemistry I	- 4
CHEM 161	General Chemistry II	4
CHEM 201	Analytical Chemistry	5
CHEM 308	Organic Chemistry I	4
CHEM 309	Organic Chemistry II	4
CHEM 311	Physical Chemistry I	4
CHEM 312	Physical Chemistry II	5
CHEM 320	Inorganic Chemistry	4
CHEM 327	Biochemistry I	4
0112111 927	Advanced chemistry electives	3-4
CHEM 480	Seminar in Chemistry*	1
0.00000		
DIRECTED H		26 CREDITS
CS 130	Introduction to Computer	3
ENC 200	Programming/BASIC	3
ENG 300 or	Technical Writing	3
ENG 330	Critical Writing	3
MATH 160	Calculus I	4
MATH 161	Calculus II	4
MATH 201	Calculus III	4
PHYS 260	Calculus III	
PH15 200	General Physics I	4
PHYS 260 PHYS 261		

ADVANCED CHEMISTRY ELECTIVES

DEE OTTODO	<i>J</i> = 1	
Choose one of	of the following:	
CHEM 321	Advanced Inorganic Chemistry*	3
CHEM 322	Environmental Chemistry	4
CHEM 328	Biochemistry II*	3
CHEM 401	Analytical Instrumentation	4
CHEM 403	Physical Chemistry III*	3
CHEM 410	Industrial Chemistry	3
CHEM 421	Advanced Organic Chemistry*	3
CHEM 423	Chemistry of Natural Products	4
CHEM 426	Organic Spectroscopy	4
CHEM 499	Independent Study	1–3

3-4 CREDITS

Course Sequence/B.S. Program

FRESHMAN YEAR

rnst semes	.C1	
BIO 163	General Biology I	4
CHEM 160	General Chemistry I	4
ENG 110	Writing Effective Prose	3
MATH 160	Calculus I	4
Second Sem	lester	
BIO 164	General Biology II	4
CHEM 161	General Chemistry II	4
MATH 161	Calculus II	4
	General education course	3

SOPHOMORE YEAR

First Semester

CHEM 201	Analytical Chemistry	5
CHEM 308	Organic Chemistry I	4
PHYS 260	General Physics I	4
	General education course	3
Second Sem	lester	
CHEM 309	Organic Chemistry II	4
CS 130	Introduction to Computer	
	Programming/BASIC	3
PHYS 261	General Physics II	4
	General education course	3

JUNIOR YEAR

First Semest	er	
CHEM 311	Physical Chemistry I	4
CHEM 327	Biochemistry I	4
ENG 300	Technical Writing	3
	General education course	3
Second Sem	ester	
CHEM 312	Physical Chemistry II	5
CHEM 320	Inorganic Chemistry	4
	General education courses	6
SENIOR YE.	AR	
First Semest	er	
	Advanced chemistry elective	3–4
	General education course	3
	Chemistry and free electives	9
Second Sem	ester	
CHEM 480	Seminar in Chemistry	1
	Chemistry and free electives	14

CERTIFICATION REQUIREMENTS 27 CREDITS Students who are interested in obtaining certification in comprehensive science must complete the sequence outlined under Department of Curriculum and Instruction.

CHEMISTRY MINOR		18 CREDITS	
CHEM 160	General Chemistry I	4	
CHEM 161	General Chemistry II	4	
Plus an additional 10 credits in chem-			
istry by advisement.		10	

Note: Students choosing a minor in chemistry are strongly urged to elect the following: MATH 160, 161, PHYS 260, 261.

COURSES

Unless otherwise noted, all courses are for 3 credits.

CHEM 120 Chemistry in Perspective

An introduction to the fundamental concepts and principles of chemistry, with a view of the development of this physical science as a human endeavor. The nature of the scientific method is emphasized, along with an elucidation of the pervasive application of chemistry in modern technology and society. Designed as a general education course in science.

Prerequisite: Basic Skills

4 credits

3 hours lecture; 21/2 hours lab

CHEM 159 Introductory Chemistry

An introduction to the concepts, principles and terminology of chemistry Designed primarily for students who have little or no background in the fundamentals of chemistry, who wish to learn the basics of chemistry or who wish to meet the requirements of CHEM 160. Not a general education course.

Lecture only

CHEM 160–161 General Chemistry I and II: Lecture

The electronic structure of atoms, molecular structure and chemical bonding, the states of matter, solutions, reaction rates and chemical equilibrium, ionic equilibria, thermodynamics, acid-base concepts, electrochemistry and coordination compounds. Laboratories must be taken concurrently.

Prerequisite: High school chemistry, CHEM 120 or 159 for CHEM 160, CHEM 160 for CHEM 161

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4 credits each
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CHEM 060–061 General Chemistry I and II: Lab 1 credit each

CHEM 164 College Chemistry: Lecture

Development of the fundamental concepts of chemistry including Stoichiometry, reactivity, atomic and molecular structure, equilibrium, introduction to organic chemistry. Part of a terminal sequence with CHEM 165. Lab must be taken concurrently

CHEM 064 College Chemistry: Lab 1 credit

SCIENCE AND MATHEMATICS

CHEM 165 Organic Biochemistry: Lecture

Development of the fundamental concepts of organic chemistry and biochemistry; emphasizes metabolism in the context of physiological chemistry. This is the second semester of a two semester sequence. A terminal course. Prerequisite: CHEM 164 Lab must be taken concurrently

CHEM 065 Organic Biochemistry: Lab 1 credit

CHEM 201 Analytical Chemistry: Lecture

The theory and methods of quantitative analytical chemistry with emphasis on chemical equilibrium and practical laboratory experience.

Prerequisite: CHEM 161 5 credits

CHEM 001 Analytical Chemistry: Lab

Must be taken with lecture, CHEM 201. 2 credits

CHEM 308–309 Organic Chemistry I and II: Lecture

A thorough exposition of the chemistry of carbon compounds including preparative methods and reaction mechanisms.

Prerequisite: CHEM 161 for CHEM 308, CHEM 308 for CHEM 309

4 credits each

CHEM 008 Organic Chemistry I: Lab 1 credit

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CHEM 009 Organic Chemistry II: Lab 1 credit

CHEM 311–312 Physical Chemistry I and II: Lecture

Chemical thermodynamics, behavior of gases, reaction kinetics, electrochemistry and introductory quantum mechanics.

Prerequisites: CHEM 309, MATH 161 and PHYS 261 CHEM 311, 4 credits; CHEM 312, 5 credits

CHEM 011 Physical Chemistry I: Lab 1 credit

CHEM 012 Physical Chemistry II: Lab 2 credits

CHEM 320 Inorganic Chemistry

Systematic study of the elements and their compounds with special reference to their location in the periodic table.

Prerequisite: CHEM 161 4 credits Lecture and lab

CHEM 321 Advanced Inorganic Chemistry

Coordination chemistry, kinetics and mechanisms of inorganic reactions and organometallic chemistry. Prerequisites: CHEM 320 and 312 Lecture only

CHEM 322 Environmental Chemistry

Considers the composition and dynamics of the environment, the reactions that take place and the impact of chemical technology. Corequisite: CHEM 309 4 credits Lecture and lab

CHEM 327 Biochemistry I

Considers the properties of metabolites, macromolecules, polyelectrolytes and the metabolic processes occurring in living organisms. Prerequisite: CHEM 309 4 credits Lecture and lab

CHEM 328 Biochemistry II

Elaborates on topics discussed in CHEM 327, with emphasis on macromolecular structures such as mitochondrial and photosynthetic membranes, multienzyme complexes and the mechanisms of replication, transcription and translation.

Prerequisite: CHEM 327 Lecture only

CHEM 401 Analytical Instrumentation

Applications of modern chemical instruments with emphasis on the underlying physical principles of instrumentation.

Prerequisites: CHEM 309 and 312 4 credits Lecture and lab

CHEM 403 Physical Chemistry III

Provides the theoretical basis for understanding the electronic structure of molecules. Prerequisite: CHEM 312 Lecture only

CHEM 410 Industrial Chemistry

Emphasizes the practical aspects of the chemical industry's practices, economics, rationale and decisions. Introduces a detailed description of the common commodities, basic raw material sources, technological problems and environmental concerns of chemical processes. Prerequisite: CHEM 309 Lecture only

CHEM 421 Advanced Organic Chemistry

Advanced study of organic chemistry with deliberate emphasis on synthetic reaction mechanisms, principles of stereochemistry and current advances in organic chemistry.

Prerequisites: CHEM 309 and CHEM 312 Lecture only

CHEM 423 Chemistry of Natural Products

Major classes of natural products of plant origin, their synthesis and the theory of biogenesis. Methods of identification and structural elucidation of natural products. Prerequisite: CHEM 309 4 credits

Lecture and lab

CHEM 426 Organic Spectroscopy

Introduces the theory and application of spectroscopy to the structure determination of organic molecules. Prerequisites: CHEM 309 and CHEM 312

4 credits

Lecture and lab

CHEM 480 Seminar

A study of specialized problems in chemistry and an introduction to the chemical literature. Making formal oral and written presentations on specific topics in chemistry is required.

1 credit

CHEM 499 Independent Study

Individual research under the supervision of a faculty member; or internship placement in industry. 1–3 credits

Physics

Professor: S. La Assistant Professor: J. Bufano

Courses and concentrations prepare students for entry into graduate school or science-oriented careers in industry, research, teaching, environmental or governmental work. Offerings include service courses required by other curricula.

LIBERAL STUDIES DEGREE

WITH A COI	NCENTRATION	
IN PHYSICS	4950 CR	EDITS
CHEM 160	General Chemistry I	4
CHEM 161	General Chemistry II	4
MATH 160	Calculus I	4
MATH 161	Calculus II	4
MATH 201	Calculus III	4
MATH 322	Differential Equations	3
PHYS 260	General Physics I	4
PHYS 261	General Physics II	4
PHYS 300	Mechanics	3
PHYS 302	Electricity and Magnetism	3
PHYS 480	Seminar	1
	Elective in physics (by advisement)	3-4
Plus two add	itional courses in chemistry	
(by adviseme	ent)	8

RECOMMENDED ELECTIVES		16 CREDITS
CS 130	Introduction to Computer	
	Programming/BASIC	3
MATH 230	Statistics I	3
PHYS 250	Basic Electronics I	3
PHYS 304	Optics	4
PHYS 403	Modern Physics	3

COURSES

Unless otherwise noted, all courses are for 3 credits.

PHYS 110 Introduction to Physics

Designed to give the nonscience student an adequate understanding of the nature of science and of the fundamental physical laws which govern our everyday lives. Topics include forces, motion, heat energy, electricity, atomic energy and fundamental ideas in chemistry. Laboratory work is closely integrated with the above topics. 3 hours lecture, 2½ hours lab

4 credits

PHYS 250-251 Basic Electronics I and II

The general philosophy of electronics as a "way of life" and its function as a basic tool in our present scientific culture. Fundamentals of the electronics including basic components and circuit configurations. Actual circuits are assembled, tested and their behavior explored. A descriptive laboratory course in basic electronic circuits without the use of extensive mathematics.

Prerequisite: PHYS 110 or permission of the instructor 2 hours lecture, 2 hours lab

PHYS 255-256 College Physics I and II

An introductory physics course for students who do not intend to specialize in the physical sciences. Requires no mathematics beyond algebra and geometry as prerequisites. Underlying principles and basic laws of Newtonian mechanics, electromagnetism and modern physics are explored.

3 hours lecture, 2½ hours lab 4 credits each

PHYS 260-261 General Physics I and II

The basic course for physics, chemistry and mathematics majors and a foundation for all advanced work in physics. Topics: introduction to vectors, statics, kinematics, work and energy, impulse and momentum, rotational motion, elasticity, harmonic motion, sound and acoustics, electrostatics, DC and AC electric circuits and instrumentation, magnetostatics, electromagnetic waves, geometrical and physical optics, polarization and an introduction to modern physics.

Corequisites: MATH 160 and 161 3 hours lecture, 21/2 hours lab

4 credits each

PHYS 300 Mechanics

Covers basic concepts in mechanics as required for advanced work in physics. Topics: mathematical formulation of mechanics utilizing vector analysis, particle dynamics, systems of particles, translational and rotational movement of rigid bodies, angular momentum and energy considerations.

Prerequisite: PHYS 261; Corequisite: MATH 201 3 hours lecture

PHYS 302 Electricity and Magnetism

Basic course covering the fundamental concepts of electricity and magnetism. Topics: vector mathematics, electrostatics, solution of electrostatic problems, dielectric materials, circuitry and solution of networks, magnetostatics, electromagnetic induction, magnetic materials, atomic origin of magnetism, ferromagnetic materials, introduction to field theory. Prerequisite: PHYS 300

3 hours lecture

PHYS 304 Optics

Theoretical and experimental aspects. Topics: reflection and refraction, plane and spherical surfaces, thin lenses, field stops and aperture stops, ray-tracing, aberrations, optical instruments, nature of light waves, superposition

SCIENCE AND MATHEMATICS

and interference, Fesnel and Fraunhofer diffraction, diffraction gratings. Cerenkov radiation, nature and origin of polarization.

3 hours lecture, 2½ hours lab 4 credits

PHYS 403 Modern Physics

Spectroscopic and other representative phenomena that form experimental foundations of modern physics. Topics: special theory of relativity, dual properties of electromagnetic radiation, Young's diffraction, blackbody radiation, photoelectric effect, Compton effect, specific heats, Frank-Hertz experiment, Rutherford scattering, Bohr's atomic model, quantum mechanical description of a particle, elementary theory of nuclear structure and reactions.

Prerequisite: PHYS 300 3 hours lecture

PHYS 480 Seminar

Emphasis on research, current literature and classroom discussion of new ideas.

Prerequisite: Permission of the instructor 1 credit

PHYS 499 Independent Study

Individual research under the supervision of a faculty member.

1-3 credits

Environmental Science

Professor: C. W. Lee

Associate Professors: S. Hanks, R. McCallum, M. Sebetich Assistant Professor: R. Pardi

The Environmental Science Program is a comprehensive bachelor of science degree program dealing with the interaction of humans and their environment from the primary perspective of the natural sciences. The course of study includes basic courses in the natural sciences biology, chemistry, physics and the earth sciences—and more advanced courses relating the natural sciences to environmental concerns. These courses include ecology, soils, hydrology, environmental chemistry, environmental physics, toxicology and aquatic ecology.

The course of study begins with an interdisciplanary course, Environmental Foundations, which integrates the natural sciences, social sciences and humanities so students begin to view the environment from a holistic viewpoint. Two other upper-level nonscience environmental courses, including environmental ethics, are required as part of the program. The program's capstone course is the Senior Practicum in which students use their training in a real case study of some specific environmental problem for a local community. The program also includes a formal co-op (field experience) requirement.

With a bachelor's degree in environmental science, a student is prepared for entry-level positions in research, manufacturing, sales and management. Potential employers include governmental agencies, private consulting firms and industries dealing with environmental problems. Also, students are prepared to continue their education at the postbaccalaureate level. The major is also quite suitable for students contemplating a career in teaching at levels K-12.

MAJOR REQUIREMENTS		60–61 CREDITS
Required Maj	or Courses	21 credits
ENV 110	Environmental Foundation	ns 4
ENV 115	General Geology	4
ENV 301	Field Experience	3
ENV 370	Soils	4
ENV 380	Junior Seminar	3
ENV 480	Senior Practicum	3
Corequireme		26–27 credits
BIO 340	General Ecology	20-27 creans 4
CHEM 160-	General Leology	1
161	General Chemistry I and I	II 8
MATH 161	Calculus II*	• 4
PHIL 3—	Environmental Ethics [†]	3
PHYS 260-		
261	General Physics I and II*	8
or	,	
PHYS 255-		
256	College Physics I and II	8
Science Elect	0,	10 credits
BIO 261	General Botany	4
	General Botany	4
or DIO 210		
BIO 218	Invertebrate Zoology (by	4
DIO (00	advisement)	4
BIO 402	Aquatic Ecology	4
CHEM 322	Environmental Chemistry	
ENV 303	Environmental Physics	3
ENV 423	Toxicology	3
ENV 470	Hydrogeology	3
Social Scienc	e Electives	3 credits
ECON 230	Economics of the Environ	iment 3
HUM 201	Humanities Honors Semi	nar III:
	Technology and Human V	alues 3
POL 222	Politics of the Environme	
PSY 360	Environmental Psycholog	
SOC 406	Social and Environmental	•
DIRECTED O	GENERAL ELECTIVE	
COURSES		15 CREDITS
BIO 163-164	General Biology I and II	8
ECON 201	Macroeconomic Principle	es 3
	Calculus I	4
HIGHLY REC	OMMENDED	12 CREDITS
CS 130	Introduction to Computer	
	Programming/BASIC	3
or	0 0	
CS 201	Computer Literacy and	
	Microcomputer Applicatio	ons** 3
ECON 202	Microeconomic Principles	
ECON 202 ENG 300	Technical Writing	, J
or	icentical writing	5
ENG 330	Critical Writing**	2
MATH 230	Statistics I	3
	Statistics I	5
*For student	s planning to go on to gr	aduate or profes

*For students planning to go on to graduate or professional school, the General Physics I–II sequence is highly recommended. These students are encouraged to take MATH 230, Statistics I, as well.

**Could be counted as an upper-level free elective. †Course in preparation.

FRESHMAN Y	TEAR	33 CREDITS
Fall		
BIO 163	General Biology I	4
CHEM 160		4
	General Chemistry I	
ENG 110	Writing Effective Prose	3
ENV 110	Environmental Foundations	4
Spring		,
BIO 164	General Biology II	4
CHEM 161	General Chemistry II	4
MATH 160	Calculus I	4
	General education courses	6
SOPHOMORI	E YEAR	35 CREDITS
Fall		
BIO 340	General Ecology	4
ECON 201	Macroeconomic Principles	3
MATH 161	Calculus II	4
PHYS 260 or	General Physics I	4
	Collogo Dhusica I	4
PHYS 255	College Physics I	4
	General education course	3
Spring		
ENV 115	General Geology	4
ENV 370	Soils	3
PHYS 261	General Physics II	4
or		
PHYS 256	College Physics II	4
	General education course	3
	Computer course*	3
	F	5
JUNIOR YEAD		-32 CREDITS
		-
Fall	R 30-	-32 CREDITS
Fall ENG 300		-
Fall ENG 300 or	R 30- Technical Writing	-32 CREDITS
Fall ENG 300 or ENG 330	R 30- Technical Writing Critical Writing	-32 CREDITS 3
Fall ENG 300 or ENG 330 ENV—	R 30- Technical Writing Critical Writing Science elective	-32 CREDITS 3 3-4
Fall ENG 300 or ENG 330	R 30- Technical Writing Critical Writing Science elective Environmental Ethics	-32 CREDITS 3 3-4 3
Fall ENG 300 or ENG 330 ENV—	R 30- Technical Writing Critical Writing Science elective	-32 CREDITS 3 3-4
Fall ENG 300 or ENG 330 ENV— PHIL 3— Spring	R 30- Technical Writing Critical Writing Science elective Environmental Ethics	-32 CREDITS 3 3-4 3
Fall ENG 300 or ENG 330 ENV— PHIL 3—	R 30- Technical Writing Critical Writing Science elective Environmental Ethics	-32 CREDITS 3 3-4 3
Fall ENG 300 or ENG 330 ENV— PHIL 3— Spring	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses	-32 CREDITS 3 3-4 3 6
Fall ENG 300 or ENG 330 ENV— PHIL 3— Spring ENV 301	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar	-32 CREDITS 3 3-4 3 6 3
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective	-32 CREDITS 3 3-4 3 6 3 3 4 3 3 -4
Fall ENG 300 or ENG 330 ENV— PHIL 3— Spring ENV 301 ENV 380	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective Social science elective	-32 CREDITS 3 3-4 3 6 3 3-4 3 3-4 3 3-4 3
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective	-32 CREDITS 3 3-4 3 6 3 3 4 3 3 -4
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective Social science elective General education courses	-32 CREDITS 3 3-4 3 6 3 3-4 3 3-4 3 3-4 3
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV ENV	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective Social science elective General education courses	-32 CREDITS 3 3-4 3 6 3 3-4 3 3 3-4 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV ENV SENIOR YEAD Fall	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective Social science elective General education courses	-32 CREDITS 3 3-3 3-4 3 -3 -3 -3 -34 CREDITS
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV ENV SENIOR YEAL	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective Social science elective General education courses	-32 CREDITS 3 3-3 3-4 3 -3 -3 -3 -34 CREDITS 6-8
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV ENV SENIOR YEAD Fall	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective Social science elective General education courses	-32 CREDITS 3 3-4 3 -34 3 -34 CREDITS 6-8 6
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV ENV SENIOR YEAD Fall ENV	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective Social science elective General education courses	-32 CREDITS 3 3-3 3-4 3 -3 -3 -3 -34 CREDITS 6-8
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV ENV SENIOR YEAD Fall ENV Spring	R 30- Technical Writing Science elective Science elective Science elective Field Experience Science elective Social science elective Social science elective R 30- Science elective Social science elective R 30- Science elective Science elective Science elective Science elective	-32 CREDITS 3 3-4 3 -3 -34 CREDITS 6-8 6 3 -34 6 -8 6 3
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV ENV SENIOR YEAD Fall ENV	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective Social science elective General education courses R 30- Science elective General education courses R 30- Science elective General education courses Science elective Science elective	-32 CREDITS 3 3-4 3 -34 3 -34 CREDITS 6-8 6
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV ENV SENIOR YEAD Fall ENV Spring	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective Social science elective General education courses R 30- Science elective General education courses R 30- Science elective General education courses Upper-level elective Senior Practicum General education courses	-32 CREDITS 3 3-4 3 -3 -4 3 3 -4 3 -3 -34 CREDITS 6-8 6 3 3 3 -4 3 3 -4 3 3 -4 3 3 -4 3 3 -4 3 3 -4 3 3 -4 3 -4 3 -4 -4 3 -4 -4 3 -4 -4 3 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4
Fall ENG 300 or ENG 330 ENV PHIL 3 Spring ENV 301 ENV 380 ENV ENV SENIOR YEAD Fall ENV Spring	R 30- Technical Writing Critical Writing Science elective Environmental Ethics General education courses Field Experience Junior Seminar Science elective Social science elective General education courses R 30- Science elective General education courses R 30- Science elective General education courses Science elective Science elective	-32 CREDITS 3 3-4 3 -3 -34 CREDITS 6-8 6 3 -34 6 -8 6 3

SAMPLE FOUR VEAD DROCDAN

•Note: Students interested in a four-year course of study may also elect to take several courses during presession and summer session to reduce the load during the regular fall and spring semesters.

*Can be counted as an upper-level elective.

COURSES

Unless otherwise noted, all courses are for 3 credits.

ENV 110 Environmental Foundations

An introduction to the study of the environment from the viewpoints of several disciplines of the natural sciences, the social sciences and humanities. These disciplines include biology, chemistry, physics, geology, soils, political science, economics, law, anthropology, sociology and ethics. The course stresses a holistic view of the environment and the interdependence of all parts of the environment. The companion workshop includes field trips and hands-on experiences which complement the materials in the lecture.

4 credits

3 hours lecture and discussion, 2½ hours workshop

ENV 115 General Geology

Includes the study of the origin and evolution of the earth, the rocks and minerals that compose it, the geological processes that are constantly changing it, the origin and evolution of plants and animals that live upon it and the role of geology in shaping man's environment. Laboratory and field trips introduce rocks, minerals, fossils, maps and landscape features.

4 credits

3 hours lecture, 21/2 hours lab

ENV 150 Meteorology

This course deals with the factors responsible for the changes in weather and climate. Topics include the chemical and physical description of the atmosphere, circulation of air masses, weather analysis and forecasting, climatic changes and human impact on weather and climate (air pollution, weather modification, greenhouse effect). 3 hours lecture

ENV 220 Historical Geology

The study of the origin and evolution of the earth and life as revealed by the geological record in the rocks. Includes the concepts of plate tectonics and sea-floor spreading; the origin, growth and drift of the continents; the rise and fall of mountain ranges; the advance and retreat of the seas and glaciers and the evolution of plants and animals as shown by the fossil record. Major emphasis on the geological history of North America.

Prerequisite: ENV 115 4 credits

3 hours lecture, 21/2 hours lab

ENV 301 Field Experience

This course places the student in an active working experience with either a professional agency, a business or a municipal body involved in some pertinent work related to the environment. Objectives are to expand students' backgrounds and their appreciation of the field, give them first-hand experience and introduce them to potential employers or help them identify areas of specialization for graduate study. Students must work a minimum of one full day per week with the agency to fulfill an on-the-job requirement. This requirement can also be fulfilled by a cooperative education placement with the program director's recommendation.

Prerequisites: ENV 110, 115, BIO 340, CHEM 161 and junior standing

SCIENCE AND MATHEMATICS

ENV 303 Environmental Physics

This course deals with the flow of energy in natural and human-made systems. Building on the First and Second Laws of Thermodynamics and the general principles of classical mechanics, the concepts of energy and entropy are quantitatively applied to natural ecosystems and various energy resources, such as fossil fuels, nuclear energy, hydropower, wind, tides, solar power, etc. These resources are also discussed in terms of the societal and environmental impacts of the associated technologies.

Prerequisites: ENV 110 and PHYS 261 or 256 3 hours lecture

ENV 315 Introduction to Oceanography

The study of the origin, evolution and extent of the oceans; waves, currents, tides, and tsunami; the plant and animal life of the sea; the nature and topography of the sea floor; recent discoveries relating to sea floor spreading and continental drift; the role of the oceans in weather and climate.

Prerequisite: ENV 110, 115 or one year of science 3 hours lecture

ENV 370 Soils

Acquaints students with the fundamentals of soil science. It teaches that soil is a natural resource which must be managed and conserved. Topics studied include the physical and chemical properties of soil, soil water, soil genesis and classification, soil microbiology, soil conservation and the uses of soil for agriculture and construction purposes. Particular attention is given to the soils of New Jersey. The laboratory emphasizes fieldwork and the measurement of chemical, physical and biological properties of soil as measured in the laboratory.

Prerequisites: ENV 115 and CHEM 161 4 credits

3 hours lecture, 21/2 hours lab

ENV 380 Junior Seminar

Designed to give third-year students a chance to reflect upon their reasoning processes and learn how to evaluate critically a number of topics of major environmental concern. Methods of critical evaluation are taught as a means of investigating the logic and reasoning behind ideas and concepts. Arguments are analyzed for format, logic, justification and persuasiveness. Students have the opportunity to study independently a problem selected in consultation with the instructor. All students are expected to take an active part in the discussions, evaluations and debates.

ENV 389 Environmental Factors in Land Use

Introduces the subject of the use and misuse of land, the consequent need for governmental review and regulation and the important role of a Natural Resource Inventory (NRI) in that process. Surveys the components of an NRI and shows how portions of one are compiled. Final class sessions are devoted to students' oral presentations of their semester projects. Prerequisite to the senior seminars.

Prerequisites: ENV 110 and junior standing 3 hours lecture

ENV 423 Toxicology

This course considers the toxic effects of natural substances and human-made pollutants on living organisms (both plants and animals) either in terrestrial or aquatic ecosystems. Biogeochemical cycles, metabolic pathways, toxicity testing and bioassays, epidemiology, mutagenesis, carcinogenesis and regulatory law are among the topics covered.

Prerequisites: ENV 115 and CHEM 161 3 hours lecture

ENV 470 Hydrogeology

This course deals with the interrelationships of geological materials and processes with water. It quantitatively addresses the ocurrence, distribution, movement and chemistry of all waters of the earth. Topics studied include the hydrologic cycle, groundwater, runoff and streamflow, water chemistry, water pollution, water resources and treatment.

Prerequisites: ENV 115, CHEM 161 and MATH 160 3 hours lecture

ENV 480 Senior Practicum

Student task force groups participate in a common project utilizing the methodologies and skills learned in the classroom. Included are graphic and communicative skills, data collection and evaluation, as well as field and laboratory techniques. An example of such a project is the compilation of a natural resource inventory for a neighboring community. The subject of the study is selected by the instructor, but the student's role in the team study is jointly determined by both the student and the instructor. Student and instructor maximally seek to simulate the working conditions of a professional consultant team engaged in a practical project. Regular work meetings are held during class time with a formal presentation at the end of the semester.

Prerequisites: ENV 380 and senior standing 3 credits

ENV 499 Independent Study

Independent research under the supervision of a faculty member. Alternatively, a student may undertake another co-op experience with a governmental agency, consulting firm or industry in the environmental area.

1–3 credits (may be taken twice for a maximum of 6 credits)

Summer Studies at the New Jersey Marine Sciences Consortium

WPC holds membership in the consortium, and WPC students may take formal courses for academic credit in marine sciences at Sandy Hook or the Seaville Field Station. These courses are given from June through August and are primarily undergraduate courses for sophomore through senior levels. Independent study in the marine sciences is offered at undergraduate and graduate levels. Course offerings vary somewhat from year to year, but the following are usually repeated: introduction to marine sciences, oceanography, basic scuba (NAUI certification), basic sailing, marine biology, ecology of the estuary (graduate only) and coastal marine geology.

50 CREDITS

Department of Mathematics

Professors: E. Goldstein, M. Kaplan, E. Phadia (chairperson), R. Stevenson

. . .

Associate Professors: B. Eastman, M. Jani

Assistant Professors: N. Assimakopoulos, J. Coomes, N. Hingston, C. Hurwitz, S. Hyman, D. Kalish, S. Maheshwari, C. Mancuso

The Department of Mathematics offers courses in the principal branches of mathematics, preparing majors for professional careers and serving students in other departments.

The program leading to a bachelor of arts degree in mathematics has two major tracks, namely, mathematics and applied mathematics. A minor in mathematics and a minor in statistics are also available, as is secondary school certification. Placement in mathematics courses is based on the New Jersey College Basic Skills Placement test scores and high school records. Students whose scores do not demonstrate readiness for MATH 160 are required to take preparatory courses which do not count toward the mathematics major.

Students who have taken calculus in high school may apply for advanced placement with credit. Mathematics majors are encouraged to minor in areas in which mathematics can be extensively applied, such as computer science, biology, chemistry, physics, economics, business administration, psychology and statistics.

Mathematics majors who intend to pursue a graduate program in mathematics are strongly advised to satisfy the intermediate reading level requirement in one of the following foreign languages: German, French or Russian.

Mathematics majors, as well as all students of the College, have access to computer facilities for modern computation and research in applied sciences.

MATHEMATICS TRACK		50 CREDITS
Required Con	urses	32 credits
MATH 161	Calculus II	4
MATH 200	Logic and Discrete Mathemati	cs 3
MATH 201	Calculus III	4
MATH 202	Linear Algebra	3
MATH 301	Modern Algebra	3
MATH 302	Advanced Calculus I	3
MATH 323	Foundations of Geometry	3
MATH 422	Complex Analysis	3
MATH 423	Real Analysis	3
MATH 425	Introduction to Topology	3
Additional Re	equired Courses	9 credits
ENG 300	Technical Writing	3
or		
ENG 330	Critical Writing	3
CS 140	Computer Science I	3
CS—	200-level or above	3

Electives		9 c redits
Choose three	e from the following:	
MATH 232	Statistical Computing	3
MATH 303	Advanced Calculus II	3
MATH 322	Differential Equations	3
MATH 324	Probability	3
MATH 325	Topics from Applied Math	3
MATH 361	Combinatorial Analysis	3
MATH 380	Mathematical Models and	
	Applications	3
MATH 399	Selected Topics	3-4
MATH 401	Applied Algebra	3
MATH 421	Mathematical Statistics	3
MATH 424	Introduction to Numerical Analysi	is 3
MATH 499	Independent Study	1–3

APPLIED MATHEMATICS TRACK

MAJOR REQUIREMENTS

Required Co	urses	32 credits	
MATH 161	Calculus II	4	
MATH 200	Logic and Discrete Mathematics	3	
MATH 201	Calculus III	4	
MATH 202	Linear Algebra	3	
MATH 230	Statistics I	3	
MATH 322	Differential Equations	3	
MATH 324	Probability	3	
MATH 325	Topics in Applied Mathematics	3	
MATH 380	Mathematical Models and		
	Applications	3	
MATH 424	Introduction to Numerical Analy	vsis 3	
Additional R	equired Courses	9 credits	
ENG 300	Technical Writing	3	
or			
ENG 330	Critical Writing	3	
CS 140	Computer Science I	3	
CS	200-level or above	3	
Electives		9 credits	
Choose three from the following:			
MATH 232	Statistical Computing	3	
MATH 301	Modern Algebra	3	
MATH 302	Advanced Calculus I	3	
MATH 303	Advanced Calculus II	3	
MATH 323	Foundations of Geometry	3 3 3 3 3	
MATH 361	Combinatorial Analysis	3	
MATH 399	Selected Topics	34	
MATH 421	Mathematical Statistics	3	
MATH 422	Complex Analysis	3	
MATH 425	Introduction to Topology	3	
MATH 499	Independent Study	1–3	

SCIENCE AND MATHEMATICS

CERTIFICATION REQUIREMENTS 33 CREDITS Students interested in obtaining teacher certification in mathematics must complete additional courses as prescribed by the School of Education (see Department of Curriculum and Instruction).

MINOR RE	QUIREMENTS	. 20-	21 CREDITS
MATH 160	Calculus I		4
MATH 161	Calculus II		4
MATH 202	Linear Algebra		3
Plus three	additional mathematics	courses	from those
1:	1 .1		

listed under the mathematics major. At least two of these courses must be at the 300-level or higher.

MINOR REQUIREMENTS 18–20 CREDITS

For students majoring in business, economics, biology, psychology: MATH 120 Finite Math 3

MAIN 120	Finite Math	
or		
MATH 202	Linear Algebra	3
Plus one of th	ne following two groups of course	s:
MATH 130	Elementary Statistics I	3
and		
MATH 150	Applied Calculus I	3
or		
MATH 160	Calculus I	4
and		
MATH 161	Calculus II	4
Electives		9 credits

Three additional mathematics courses from the 200-level or higher by advisement.

Statistics Minor

Offered in response to the demand for professionals trained in various areas of statistics such as biostatistics, quality control, operations research, economic forecasting, opinion polls and marketing analysis. This minor trains students to be proficient in statistical techniques useful in their chosen professions.

MINOR REQUIREMENTS		REDITS	
For a Non-Mathematics Major			
MATH 120	Finite Math	3	
or			
MATH 202	Linear Algebra	3	
MATH 150	Applied Calculus I	3	
MATH 230	Statistics I	3	
MATH 232	Statistical Computing	3	
MATH 324	Probability	3	
MATH 421	Mathematical Statistics	3	
For a Mathematics Major			
MATH 230	Statistics I	3	
MATH 324	Probability	3	
MATH 232	Statistical Computing	3	
MATH 399	Selected Topics	3	
MATH 421	Mathematical Statistics	3	
Plus one of the following (by advisement):			
MGT 470	Introduction to Operations Researc	h 3	
ECON 211	Economic Statistics II	3	

Note: These courses cannot be used for both a math major and statistics minor.

COURSES -

Unless otherwise noted, all courses are for 3 credits.

MATH 101 College Arithmetic

This course covers the arithmetic of whole numbers, signed numbers, fractions, decimals and percents, with an emphasis on estimation and problem solving. Credits for this basic skills course are not applicable toward degree requirements.

MATH 105 Introductory Algebra

This course covers polynomial arithmetic, factoring, solving questions (linear or quadratic) and graphing. Credits for this basic skills course are not applicable toward degree requirements.

MATH 110 Contemporary Mathematics

Provides the mathematical understanding generally expected of an educated adult. Topics: elementary logic and set theory, mathematical systems and two selected topics such as geometry, matrix theory or an introduction to computers.

MATH 115 Intermediate Algebra

A complete, college-level coverage of algebra with an emphasis on the logical development of the subject. Topics include algebraic fractions, laws of exponents and roots, equation solving, graphing, series and sequences and mathematical induction.

MATH 116 Precalculus

The study of relations and functions, especially linear, polynomial, rational, exponential, logarithmic and trigonometric functions.

Prerequisite: MATH 115 or equivalent

MATH 120 Finite Mathematics (for students in the social, behavioral and life sciences)

An introduction to topics from linear algebra and probability theory with emphasis on applications. Topics: elementary set theory, probability, matrices, systems of linear equations, linear programming and game theory. Prerequisite: MATH 115 or equivalent

MATH 130 Elementary Statistics I

The development of statistical concepts, with applications to various disciplines. Includes descriptive statistics, probability, binomial distribution, normal distribution, sampling theory, elements of estimation and confidence intervals and hypothesis testing, t-test, Chi square test and regression and correlation. Not open to science or mathematics majors.

MATH 131 Elementary Statistics II

A follow-up to MATH 130. Expands ideas about statistical inference—for example, problems of estimation and testing of hypothesis involving more than two populations, analysis of variance, inferences about standard deviation, contingency tables and goodness of fit, correlation and regression analysis and nonparametric methods. Prerequisite: MATH 130 MATH 150 Applied Calculus I (for students in business, economics, psychology, social science)

The essential ideas of the calculus: functions, limits, continuity, differentiation, integration, elementary differential equations. Applications stressed. Trigonometry is not required. May be followed by MATH 161 or 250 to complete one year of calculus.

Prerequisite: MATH 115 or equivalent

MATH 160 Calculus I

Functions and operations on functions, limit and continuity of functions, derivatives, differentiation of algebraic and trigonometric functions and applications, differentials, indeterminate forms and antiderivatives. Prerequisite: MATH 116 or equivalent

4 credits

MATH 161 Calculus II

Fundamental theorem of calculus; integration, applications of the integral; exponential and logarithmic functions and their derivatives; improper integrals; Taylor polynomials; trigonometric integrals; techniques for formal integration.

Prerequisite: MATH 150 or 160 4 credits

MATH 200 Logic and Discrete Mathematics

The sentential calculus, the predicate calculus, inference and proof, axiomatic foundations of set theory, partial ordering relations and their graphs, elementary lattice theory, Boolean algebras and applications to switching theory, infinite sets, theory of cardinal and ordinal numbers.

Prerequisite: MATH 160 or permission of the instructor

MATH 201 Calculus III

Infinite series, power series and convergence tests. Conic sections, rotation of axes, graphing and area in polar coordinates. Vectors and vector valued functions, calculus of functions of several variables including partial differentiation and multiple integrals.

Prerequisite: MATH 161

MATH 202 Linear Algebra

Systems of equations, matrices, determinants, vector spaces, inner product spaces, linear transformations, eigen values and eigen vectors.

Prerequisite: MATH 161

MATH 230 Statistics I

Measures of central tendency, measures of variation, graphical techniques for univariate and bivariate data, correlation and regression; probability, binomial and normal distributions, estimation, confidence interval, testing of hypothesis; contingency tables, analysis of variance; nonparametric methods. This course is intended for math and science majors, but is open to anyone with permission of the instructor.

MATH 232 Statistical Computing

Statistical data analysis. Students solve statistical problems on the computer with the help of statistical packages, such as BMD, SPSS, SAS, etc., and learn to read the outputs and draw inferences.

Prerequisite: MATH 131 or 230

MATH 250 Applied Calculus II (for students in business, economics, biology and psychology)

Elementary differential equations, differentials, applications of integration to probability and statistics, functions of several variables and optimization, Lagrange multipliers.

Prerequisite: MATH 150 or 160

MATH 301 Modern Algebra

An introduction to groups, isomorphisms, rings, integral domains and fields. Emphasis is placed on techniques of proofs.

Prerequisite: MATH 200

MATH 302 Advanced Calculus I

Some basic theorems: nested interval, Bolzano-Weierstrass, Heine Borel. The limit, continuity, uniform continuity, supremum and infimum of sets, sequences, Cauchy convergence criterion, uniform convergence and infinite series.

Prerequisites: MATH 200 and 201

MATH 303 Advanced Calculus II

Reimann-Stieltjes integral, fundamental theorem of integral calculus, continuity and differentiation in several variables, implicit function theorem, topology of the real line and selected topics.

Prerequisite: MATH 302

MATH 322 Differential Equations

A study of the methods of solution and applications of ordinary differential equations. First order equations, existence and uniqueness of solutions, separation of variables, exact equations, integrating factors, linear equations, undetermined coefficients, variation of parameters, Laplace transforms, series solutions, systems of equations and elementary numerical methods. Prerequisite: MATH 161

MATH 323 Foundations of Geometry

Foundations of geometry develops an axiomatic approach to the study of geometry with specific applications to finite, Euclidean, and non-Euclidean geometries.

Prerequisites: Knowledge of Euclidean geometry, MATH 161 and MATH 200

MATH 324 Probability

Probability axioms, combinatorial problems, discrete and continuous sample spaces, random variables, mathematical expectation, probability functions, densities, distribution functions and special distributions. Prerequisite: MATH 150 or 161

SCIENCE AND MATHEMATICS

MATH 325 Topics from Applied Mathematics

Topics selected from various branches of applied mathematics. The mathematical principles and theories involved are applied to problems in the physical sciences, mathematics, biological sciences, business and computer science.

Prerequisite: MATH 201 or permission of instructor

MATH 361 Combinatorial Analysis

Problems in combinatorics, pigeonhole principle, generating permutations and combinations, unimodel property of binomial coefficients, inclusion-exclusion principle, recurrence relations, generating functions, combinatorial designs, practical problems in the theory of graphs, 5color theorem.

Prerequisite: MATH 161

MATH 380 Mathematical Models and Applications

Mathematical models: Markov chain models and applications, input-output models in economics, linear optimization (linear programming) models and health care, business and transportation problems; game theory; graph (network) theory and applications. Prerequisite: MATH 202 or MATH 120

MATH 399 Selected Topics

Topics not presently offered in other courses. Content changes each semester. Prerequisites: To be determined 3–4 credits

MATH 401 Applied Algebra

Boolean algebra and applications to switching theory, automata (finite state machines) and Turing machines, recursive functions and some ideas in theory of computability, groups, rings, polynomial rings, finite fields applied to coding theory; development of binary group codes, Hamming codes, B-C-H codes; relations of geometry and statistical block designs to codes; importance of codes in communications.

Prerequisite: MATH 301 or MATH 202 or permission of instructor

MATH 421 Mathematical Statistics

Distribution theory, sampling, point and interval estimation, methods of estimation, properties of estimators, maximum likelihood estimation, hypothesis testing and linear models.

Prerequisite: MATH 324

MATH 422 Complex Analysis

Elements of complex analysis. Complex numbers, analytic functions, Cauchy integral theorum, Cauchy integral formula, power series and conformal mapping. Prerequisite: MATH 302

MATH 423 Real Analysis

Riemann integration, measurable sets, measurable functions, Lebesque integration, metric spaces, completeness and selected topics.

Prerequisite: MATH 302

MATH 424 Introduction to Numerical Analysis

Treatment of computational techniques of numerical integration, numerical solutions of linear equations, polynomial approximation, interactive solution of nonlinear equations, numerical methods for solving differential equations and applications of these methods to computer techniques.

Prerequisite: MATH 322

MATH 425 Introduction to Topology

Topological spaces and their properties, Homeomorphisms and invariant properties, separation and countability axioms, network theory and applications. Prerequisite: MATH 302

MATH 499 Independent Study As approved and to be arranged 1–3 credits

School of Social Science

School of Social Science

William Small, Dean Office: Science Complex 351

The School of Social Science offers undergraduate degree programs in sociology/anthropology, geography, political science and psychology. The programs are geared for those interested in a career in the social sciences, including teaching and preparation for graduate study.

Highly motivated students may enroll in an honors program in biopsychology. The School of Social Science also offers internships in areas such as social work, labor studies, political science and policy analysis. These programs, along with independent study options and departmental seminars, encourage the development of unique theoretical and practical competencies as a part of the student's total educational experience.

Pre-law advisement is offered in conjunction with the School of Management and the Department of Political Science.

Persons with specific questions regarding study opportunities for the highly motivated student within the School of Social Science should contact the departmental chairperson or program coordinator responsible for the major area of academic interest. Information is also available through the office of the school dean.

Liberal Studies Major

Students interested in several disciplines offered by the School of Social Science, but who do not wish to major in any one of them, may pursue a liberal studies major in the school. Under this program, with the assistance of an academic advisor, students select a total of 48 credits from at least three of the school's majors, taking no more than 18 credits in any one of them.

Students who successfully complete this major earn a bachelor's degree in liberal studies: Social Science.

Honors Program in Biopsychology

Professors: J. Green, M. Hahn, D. Vardiman Associate Professors: R. Benno, D. Desroches

The honors program in biopsychology draws on discoveries in such fields as behavior, genetics, neuroanatomy, brain chemistry, neurophysiology, psychopharmacology and many others to unravel the biology of the mind and behavior. The National Science Foundation awarded two grants to support the development of this program. As with all honors programs at WPC, biopsychology is not a major, but a distinctive cluster of courses which adds breadth to, and reinforces, students' chosen majors.

Open to majors in biology, chemistry, nursing, psychology and sociology, this program is highly recommended for students planning graduate study—including premedical/dental/veterinary/graduate nursing students----and, in general, those students interested in clinical or research careers. As an honors program, biopsychology is designed for highly motivated individuals seeking opportunities both to learn and to demonstrate excellence. Interested students begin in the freshman year with a set of foundation courses carefully selected to provide a firm basis for the study of more advanced disciplines. Students begin taking the core biopsychology courses in the junior year. The curriculum is enriched with seminars, discussion groups, research opportunities and speaker series. Students and faculty participate together in a closely knit academic community.

FOUNDATIO	N COURSES	25-47 CREDITS	
Biology			
BIO 112-	General Anatomy and		
113	Physiology I and II	8	
or			
BIO 114	Applied Anatomy and Phy	siology 4	
BIO 163-		0,	
164	General Biology I and II	8	
Chemistry			
СНЕМ 160-			
161	General Chemistry I and	II 8	
and	General chemistry rand		
CHEM 308-			
309	Organic Chemistry I and	II 9	
or		•	
CHEM 164-	College Chemistry and C	rganic	
165	Biochemistry	8	
Computer Sc	ience		
CS 130	Introduction to Compute	r	
00 190	Programming/BASIC	. 3	
0-	110gramming 17 DIO	5	
or			
CS 235	Introduction to FORTRAN	N 3	
or			
MATH 232	Statistical Computing	3	
or			
PSY 208	Computer Applications o	f Statistics	
	in Psychology	3	
Physics			
Choose one of the following by advisement (not required			
of nursing stu		···· (···· 1····	
PHYS 255-			
256	College Physics I and II	8	
-	conege mysics I and II	0	
or			
PHYS 260-			
261	General Physics I and II	8	
or			
PHYS 110	Introduction to Physics	4	
Psychology			
PSY 110	General Psychology	3	
Statistics		0	
MATH 230	Statistics I	· ·	
	Statistics I	3	
Or DEV 202			
PSY 202-		- 1	
203	Experimental Psychology	I and II 8	

CORE COU	RSES 1	4 CREDITS
BIPY 474	Neuroscience	4
BIPY 475	Behavior Genetics	4
PSY 353	Physiological Psychology	3
	Topical electives in biopsychol	ogy
	(one or more)*	3

*Choose from sociobiology, psychopharmacology, biorhythms in physiology and behavior and special current topics as announced.

COURSES

Unless otherwise noted, all courses are for 3 credits.

BIPY 474 Neuroscience

A study of the brain; specifically the integrated roles of the anatomy, chemistry, histology and electrical activity of the central nervous system. The laboratory component focuses on anatomy and techniques for the study of brain functioning.

Prerequisites: BIO 163–164, 112–113 or 114 and one year of chemistry and one semester of psychology

4 credits

Lecture and lab

BIPY 475 Behavior Genetics

An introduction to the concept of gene-environment interaction as a determiner of both animal and human behavior. Exposure to various methods of experimental and correlational types of investigation. Prerequisites: BIO 163–164, 112–113 or 114 and one year of chemistry and one semester of psychology

4 credits Lecture and lab

BIPY 476 Developmental Biopsychology

Designed to introduce students to the scope and methods of a psychobiological approach to development. Stresses the phylogenetic and ontogenetic processes influencing individuals, groups, species and phyla, with special emphasis on human groups.

Prerequisites: PSY 353, BIO 163-164, 112-113 or 114

BIPY 479 Biorhythms in Physiology and Behavior Focuses on the role of biological rhythms in the adaptive functioning of organisms. Examines yearly, monthly, tidal, daily and sleep/dream cycles; the nature and control of internal clock mechanisms and the implications of biorhythms for illness and psychopathology. Prerequisites: BIO163–164, 112–113 or 114

PSY 353 Physiological Psychology

Explores the interrelationships between the physiology of the nervous system and psychological functions such as perception, consciousness, motivation, emotion, reward, memory and learning.

Prerequisites: PSY 110 and BIO 114 or equivalent

PSY 415 Psychopharmacology

Focuses on the major classes of drugs which alter brain and psychological functioning. Examines in depth and compares the effects of these drugs and the mechanisms by which they act.

Prerequisites: BIO 163-164, 112-113, 114 or PSY 353

Department of Political Science

Professors: M. Chadda, S. Kyriakides, L. Rosenberg, M. Weinstein (chairperson)

Associate Professors: G. Gregoriou, S. Shalom, C. Sheffield, L. Wolf

The political science curriculum is designed to help students understand the political aspects of society, to train them in the analysis of political problems and to provide insights into the relation of the individual to government, and of governments to one another. Students planning to study law will find the political science major most useful. Careers in business and government are aided substantially by a political science background.

In addition to taking required major courses, students elect other courses to meet particular personal and career interests such as comparative politics, political theory, international relations, women's studies, American institutions and political behavior.

A field-study or internship program in politics affords interested students the opportunity to apply and enhance their training. Upon satisfactory completion of basic courses, students are placed in governmental agencies (e.g., legislative offices, political parties and interest groups, criminal court systems, etc.). Prior application is necessary, and academic credit is granted upon the successful completion of the internship.

MAJOR REQU	JIREMENTS	36 CREDITS
Required Cou	urses	18 credits
POL 120	American Government and F	olitics 3
POL 211	Classical and Medieval Politic	al
	Theory	3
or		
POL 212	Early Modern Political Theor	y 3
POL 230	Comparative Politics: Develo	pment
	and Modernization	3
POL 240	International Relations	3
POL 260	Research Methods in Politica	1
	Science	3
POL 480	Seminar in Political Science	open to
•	juniors and seniors; different	
	seminars are offered each se	mester) 3

Political Science Electives

18 credits

Note: Majors in political science are encouraged to select courses in such related areas as economics and business, sociology/anthropology/geography, philosophy, history, African and Afro-American studies and psychology.

MINOR REQUIREMENTS		18 CREDITS
Required Courses		6 credits
POL 110	Introduction to Politics	3
POL 120	American Government	3
Political Science Electives		12 credits
(By advisement)		

CERTIFICATION REQUIREMENTS 27 CREDITS

Students interested in obtaining teacher certification in social studies must complete the requirements listed under the **Department** of **Curriculum** and **Instruction**.

COURSES

Unless otherwise noted, all courses are for 3 credits.

POL 110 Introduction to Politics

An inquiry into the nature, methodology and subject matter of politics. Basic ideas and problems in the field of politics—value-free inquiry, freedom, authority, justice, equality, alienation, revolution and change, rights and obligation—are examined in their philosophical and practical socioeconomic setting. Attention is also given to recent and contemporary crises.

POL 120 American Government and Politics

Analysis of the structure and function of basic institutions of American government. The cultural setting, constitutional foundations and policy-making process are examined in detail.

POL 211 Classical and Medieval Political Theory

Analyzes, in depth, the political ideas of important classical and medieval philosophers and schools of thought. Ideas on justice, authority, rights and duties, equality, laws and constitutions and the "good life" are given an analytical and historical perspective.

Prerequisite: POL 110 or 120

POL 212 Early Modern Political Theory

The development of political theory from the inception of the modern state. Emphasis is on concepts such as natural law and natural rights, state and sovereignty, individual rights and the community. Selected political thinkers, such as Machiavelli, Hobbes, Locke and Rousseau, are given particular attention and placed in historical perspective. Prerequisite: POL 110 or 120

POL 221 State and Local Government

A study of the American system of federalism through consideration of the dynamics of government in the fifty states and their relationship to national and local governments with special emphasis on New Jersey. Attention is given to the executive, legislative and judicial organizations and to the performance of governmental functions within a political framework.

POL 223 Urban and Suburban Politics

A theoretical and empirical analysis of the distribution of political power in both central cities and suburban areas. Prerequisite: POL 110, 120 or 227

POL 224 Political Parties

A study of the organization and operation of political parties in the United States. Formal structure, the role of ideology, voting behavior and the influence of pressure groups on political parties are examined. Prerequisite: POL 110 or 120

POL 225 Political Economics of the United States Emphasizes the interrelationship of politics and economics and traces their influence on many of the major issues of our times.

Prerequisite: POL 120 or ECON 210

POL 230 Comparative Politics: Development and Modernization

An introduction to the field of comparative politics. Emphasizes a critical analysis of the principal approaches and models currently employed by political science in an attempt to understand the process of political change and the variegated political systems of the world. Prerequisite: POL 110 or 120

POL 240 International Relations

A study of the nation-state system, the struggle for power, the changing patterns of the international system and the basic influences shaping the foreign policy of states. Prerequisite: POL 110 or 120

POL 241 War and Peace

The origins of war and the quest for peace. The economic and psychological drives behind wars, weapons, systems and international "security" through armaments are analyzed.

Prerequisite: POL 230 or 240

POL 252 Politics of the Environment

An examination of the responsibilities and powers of the legislative and executive branches of government regarding environmental problems, their solutions and enforcement. Emphasis on ways in which supportive and nonsupportive public opinion and interest groups influence government and environmental policy. Prerequisite: POL 110 or 120

POL 260 Research Methods in Political Science

Designed to enable students to do research in political science. Topics include word processing, library resources and how to write a research paper. Prerequisite: POL 120

POL 262 Data Analysis for Political Science

Covers some elementary statistical methods appropriate for the kinds of data collected by political scientists and provides an introduction to the computer analysis of such data.

Prerequisite: POL 120

POL 272 Politics and Sex

A study of the implications for American political institutions of the changes in traditional roles of both men and women.

POL 300 Politics and Labor Movements

A variety of philosophical, ideological and historical-institutional arrangements related to labor are explored. Emphasis on the origins and development of trade unionism and class consciousness, relations between capital and labor, old and new working class, role of labor in competitive and monopoly capitalism, technology and labor, job satisfaction and alienation under capitalism and socialism. Prerequisite: POL 110 or 120

POL 311 American Political Theory

American political theory from its origins in English liberalism to the present day. Evaluation of the American political tradition in contrast to major political ideas of Europe and in terms of the uniqueness of the American historical inheritance and environment.

Prerequisite: POL 110 or 120

POL 322 The American Presidency

A study of the origins and evolution of the presidency. The various roles of the president are analyzed and attention is given to the growing pains of and the resulting challenges to the modern presidency.

Prerequisite: POL 120

POL 323 Political Socialization

One of the continuing and central themes of political theory—how citizens are inducted into their politics. The concept of political culture is subjected to a close and critical examination, and major attention is devoted to the processes, agents and transmission belts through which political values and attitudes are formed and communicated to succeeding generations.

Prerequisites: POL 110, 120 or permission of instructor

POL 325 Constitutional Law: The Judicial Process Analysis and examination of U.S. Supreme Court decisions in such areas as judicial review, scope of federal power, federal-state relations, commerce, taxing and spending, regulations of economic and property interests, and other sources of legislative and executive power.

Prerequisite: POL 120

POL 326 Constitutional Law: Civil Liberties and Civil Rights

Leading decisions of the U.S. Supreme Court are analyzed and discussed with special attention given to the development of due process, the court as arbiters of intergroup relations, the rights of the defendant, the guarantees of personal security, national security and the position of the individual, First Amendment interpretations and the problems of implementing civil rights for the black community and other minority groups.

Prerequisite: POL 120

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POL 328 Urban Policies and Problems

An intensive consideration of the formation and implementation of selected urban policies and programs. Fieldwork on a specific topic is encouraged. Prerequisite: POL 120

POL 332 European Political Systems

A systematic and comparative study of the political systems of Western Europe and the Soviet Union. Prerequisite: POL 230 or 240

POL 333 Politics of the Third World

A comparative analysis of selected transitional politics systems in Latin America, Africa and Asia. General problems arising during the transition from traditional societies to modern industrial states are examined to describe typical patterns of political change. Prerequisite: POL 230 or 240

POL 334 Communist Political Systems

A comparative analysis of Communist political systems in theory and practice.

POL 335 Politics of the Soviet Union

Soviet political systems with an analysis of the Russian and Marxist-Leninist traditions leading to the creation of the Soviet party-state, the role of the Communist party as an instrument of power, the politics of succession, the police, the economy and the social and cultural life.

POL 337 Politics of Latin America

An examination of the nature of Latin-American politics and the reality of current political institutions and movements in this Third World area. U.S. policy toward the region is analyzed.

Prerequisite: POL 230 or 240

POL 338 Caribbean Political Systems

A survey of political development in the varied societies of the Caribbean. Cuba, Haiti, the Dominican Republic, other former British colonies, the French and Dutch islands and Central America are covered. Colonialism, trade relations and cultural forces are also dealt with to enhance understanding of trends in the region.

Prerequisite: POL 230 or 240

POL 342 International Political Economy

Analyses of global issues—such as the quest for new international order, world trade dilemmas, economic relations between rich and poor states and their political implications—from a political-economical perspective. Prerequisite: POL 240

POL 345 United States Foreign Policy

An analysis of the theoretical foundations of foreign policy and the formulation of United States foreign policy. Includes the problems of decision making, major issues and problems of United States foreign policy in the comtemporary world.

Prerequisite: POL 230 or 240

POL 346 Multinational Corporations and International Labor

Analyzes the political implications—both in the host and home countries—of transnational corporations. Examines the impact on development, labor policies and income distribution.

POL 352 Politics of Poverty

An analysis of poverty in America and the administration of poverty programs. Focus is on the political implications of the various definitions of poverty and the poor. Prerequisite: POL 110 or 120

POL 372 Women in Comparative Politics

Investigates and compares women's concerns on an international basis.

Prerequisite: POL 210 or HSA 300

SOCIAL SCIENCE

POL 412 Marx and the Marxists

The intellectual development of Marx and Engels. Earlier philosophical and historical movements (political economy, Utopian socialism, German idealism and working class movements) are given attention to place Marxism in historical perspective.

Prerequisite: POL 110, a political theory course or permission of instructor

POL 414 Capitalism and Socialism

Nineteenth-century origins of socialist theory are analyzed, but emphasis is on twentieth-century schools of socialist theory and practice-Marxism-Leninism, Trotskyism, Maoism, African socialism, anarcho-communism, women's liberation and the new left.

Prerequisite: POL 110, a political theory course or permission of instructor

International Law POI 444

Study of international law via the case method. Examines the power realities beneath international law. Also analyzes the origins, development and function of the United Nations.

Prerequisite: POL 240 or permission of instructor

Department of Psychology

Professors: R. Krate, G. Leventhal, B. Silverstein, D. Sugarman, D. Vardiman, R. White

Associate Professors: S. Boone, T. Silverman-Dresner, J. Green, D. Grey, T. Haver, A. Lynch, A. Montare (chairperson), B. Pakizegl, D. Skillin

Assistant Professor: N. Kressel

Students who elect psychology courses explore in depth current theories and research in psychology and seek to understand both their historical development and their relationship to other academic disciplines.

A wide range of courses is offered in each of five major areas-development, social psychology, information processing, physiological psychology and clinical psychology-which not only gives the student a broad background in the field but permits specialization in one or more particular areas of interest.

Courses prepare students to understand and use the tools of psychology, including experimental research methods. Students gain experience both in reading and critically evaluating the work of others and in pursuing their own projects. Students are encouraged to participate in faculty-directed research in such widely divergent areas as perception, aggression, infancy, sex roles and biofeedback.

These experiences, as well as the opportunity to participate in independent study, field placements and seminars, provide a well-rounded program for students who wish to pursue graduate study in psychology or in related areas.

POL 480 Seminar in Political Science

A critical analysis of literature in the field. At least one seminar is offered each semester. Topics vary according to instructors' and students' interests.

Open only to junior and senior majors in political science.

POL 490 Senior-Graduate Seminar in Political Theory

Analyzes the literature in political theory. Topics vary according to student interests and faculty specialty.

POL 495 Internship in Politics

Designed primarily for students interested in practical aspects of politics and government. Students work from 8 to 40 hours a week under the guidance of experienced public officials. Field placements are made in management areas such as personnel, legislative planning, campaigning, or public service activities. Periodic conferences and a monthly seminar round out the program.

POL 499 Independent Study As approved and to be arranged.

1-6 credits

MAJOR REQU	JIREMENTS	38-40 CREDITS
A. Required Core		17 credits
PSY 110	General Psychology	3
PSY 202-	Experimental	
203	Psychology I and II	8
PSY 230	History and Systems of Psy	chology 3
PSY 480	Seminar	3

B. Track Courses 15-16 credits Seven courses must be selected from the five tracks listed below so that (1) at least one course is taken from each track (15-16 credits) and (2) two additional courses are taken from among the five tracks, or one additional track course plus an independent study (6-7 credits).

The purpose of the track course distribution is to provide breadth to the curriculum. The additional course(s)/independent study can be taken from a single track to provide opportunity for depth.

Directed Elec	ctives	7 credits
BIO 114	Applied Anatomy and Physiology	4
PSY 208	Computer Statistical Applications	in
	Psychology	3

PSYCHOLOGY TRACKS-Select a minimum of one course from each of the following tracks:

1. Developmental DEV 210 Developmental Psychology*

F31 210	Developmental rsychology	5
PSY 320	Psychology of Adolescence	3
PSY 330	Psychology of Aging	3
PSY 340	Infancy	3
PSY 352	Psycholinguistics	3
*Prerequisite	to all courses in the developmental track.	

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2. Informatio	n Processing	
PSY 250	Psychology of Consciousness	3
PSY 352	Psycholinguistics	3
PSY 354	Psychology of Learning	3
PSY 375	Human Information Processing	3
PSY 379	Children's Learning	3
PSY 382	Operant Modification of Behavior	3
PSY 420	Perception	3
PSY 450	Cybernetic Psychology	3
3. Social		
PSY 220	Social Psychology	3
PSY 225	Psychology of Social Issues	3
PSY 260	Psychology in Business and Industry	3
PSY 290	Child Abuse and Neglect	3
PSY 311	Psychology of Women	3
PSY 325	Psychology of the Family	3
PSY 360	Environmental Psychology	3
PSY 380	Field Methods in Psychology	3
PSY 381	Psychology of Aggression	3
4. Physiologi	cal	
BIPY 474	Introduction to Neuroscience	4
BIPY 475	Behavior Genetics	4
BIPY 476	Developmental Biopsychology	3
BIPY 479	Biorhythms in Physiology and	
	Behavior	3
BIPY 499	Current Topics in Biopsychology	3
PSY 353	Physiological Psychology ⁺	3 3 3
PSY 415	Psychopharmacology	3
PSY 460	Comparative Psychology	3
⁺ Prerequisite	to all courses in the physiological track.	
5. Clinical/Pe	ersonality	
PSY 310	Psychological Testing	3
PSY 322	Group Dynamics (p/f grades only)	3
PSY 350	Theories of Personality	3
PSY 351	Abnormal Psychology	3
PSY 410	Introduction to Counseling and	
	Psychotherapy	3

MINOR REQ	UIREMENTS 18 CRE	DITS
PSY 110	General Psychology	3
PSY 210	Developmental Psychology	3
PSY 220	Social Psychology	3
PSY 230	History and Systems of Psychology	3
Plus two addi	tional psychology courses by adviseme	ent 6

COURSES

Unless otherwise noted, all courses are for 3 credits.

PSY 110 General Psychology

An intensive investigation of the chief facts, principles and problems of human behavior with special emphasis on current research and theory. The biological foundations of behavior, sensory processes, learning, perception, thinking, emotion, motivation, personality and behavior pathology are examined to establish the foundations for advanced study in psychology.

PSY 202 Experimental Psychology I: Applied Statistics

An introduction to contemporary statistical procedures and computational aids appropriate to researchers in the behavioral sciences. Emphasis on generalized factorial research design and data analysis procedures. Laboratory sessions provide experience in the application of lecture material.

4 credits

PSY 203 Experimental Psychology II: Laboratory A continuation of PSY 202. Acquaints students with the nature of scientific investigation with special emphasis on the use of experimental techniques in the behavioral sciences. Participation in laboratory experiments and the design and completion of an original research project are required.

4 credits

PSY 208 Computer Statistical Applications in Psychology

An introduction to computer statistical applications in modern psychology emphasizing the use of statistic analysis software. Acquaints students with similarities and differences between statistical analysis software. Computer laboratory sessions provide experience in the application of lecture material.

PSY 210 Developmental Psychology

The development of the individual through the life-span, with special attention to early childhood. Theories of Erikson and Piaget and their practical applications are considered.

PSY 220 Social Psychology

Issues related to social behavior and influence, including interpersonal relationships and group processes, are explored and analyzed.

PSY 225 Psychology of Social Issues

Basic concepts, theories and research findings from the field of psychology applied to an analysis of major social problems confronting American society.

PSY 230 History and Systems of Psychology

The foundations of modern psychology, starting with Descartes. Historical and philosophical understanding of growth of psychology as a discipline and the emergence of contemporary viewpoints are surveyed.

PSY 250 Psychology of Consciousness

Examines the different forms of consciousness, the synthesis of these different streams of knowledge and their relationship to individual, unconnected states of awareness. Covers intellectual and intuitive modes.

PSY 260 Psychology in Business and Industry

Applications of psychology (experimental, social, clinical and industrial) in the areas of business and industry including human performance, organizational behavior, marketing and advertising.

SOCIAL SCIENCE

PSY 290 Child Abuse and Neglect

The problem of physical and psychological abuse and neglect of children is examined from interpersonal and social perspectives. The multivariable etiology of the problem and attempts at intervention, prediction and prevention are discussed. Contributions from animal studies and crosscultural studies are used to clarify issues in the area. Consequences of abuse and neglect for the cognitive, physical and social emotional development of children are analyzed.

PSY 310 Psychological Testing

The nature and functions of psychological testing, the interpretation of tests through scores and clinical and research hypotheses. Covers intelligence, aptitude, personality tests; particular emphasis on clinical interpretation.

PSY 311 Psychology of Women

Various psychological theories of women—Freud and the Freudians, Karen Horney, the behaviorists and the feminists—are surveyed, and various psychological research findings are evaluated.

PSY 320 Psychology of Adolescence

A consideration of the psychological effect of physical maturity on the interests and intellectual development of the adolescent. Includes a study of recreational activities, educational needs and the social and emotional problems of the age group.

Prerequisite: PSY 210

PSY 322 Group Dynamics

A study of interpersonal behavior and group processes, emphasizing the laboratory approach and the techniques of sensitivity training. Classroom experiences constitute a significant part of the course content. The student learns about himself and others by direct participation, discussion and evaluation within the student group.

Prerequisite: PSY 220

Pass/fail only

PSY 325 Psychology of the Family

This course examines the psychological process operating within the family in terms of interactions among adults, parents and children and siblings.

Prerequisite: PSY 210

PSY 330 Psychology of Aging

Examines the psychology of aging including social, developmental, cognitive and biological perspectives. Also explores aging as a current social issue, with emphasis on mental health aspects. Prerequisite: PSY 210

PSY 340 Infancy

A survey of research and theory relating to psychological development during infancy. Prerequisite: PSY 210

PSY 350 Theories of Personality

Various approaches to personality as defined by Freud, Adler, Jung, Horney, Sullivan, Allport, Rogers, Maslow and Kelly are explored.

PSY 351 Abnormal Psychology

Issues of abnormal personality and behavior, in terms of the adaptation of individuals to their social environment. Includes consideration of the dynamics of personality development and adjustment.

PSY 352 Psycholinguistics

A study of the major theories of speech and language acquisition, combined with direct observation of such behavior in two-to-five year olds. Approximately one-half of the time is devoted to field study.

Prerequisite: PSY 210

PSY 353 Physiological Psychology

Explores the interrelationships between the physiology of the nervous system and psychological functions such as perception, consciousness, motivation, emotion, reward, memory and learning.

Prerequisites: PSY 110 and BIO 214 or equivalent

PSY 354 Psychology of Learning

An examination of the research methods, empirical findings and theoretical interpretations of conditioning and learning phenomena, including historical and current trends in research and theory in this area.

PSY 360 Environmental Psychology

Focuses on individuals' psychological states and social behavior in relation to their physical environment, both natural and man-made. Includes spatial features of social interaction, the behavioral properties of places and locational behavior of individuals and groups.

PSY 365 Psychology and Culture

Examines the ways in which aspects of one's cultural context affects one's thought processes, personality and psychopathology. For each area (cognition, psychopathology, social, personality), the major influential cultural variables are discussed, and data from various cultures are used to illustrate, support or expand the theories and hypotheses in the field.

PSY 375 Cognitive Psychology

A critical examination of man's information processing capabilities and limitations. Emphasis on the theoretical principles that underlie the attention, perception and memory of events, as well as current research problems. Prerequisite: PSY 203 recommended

PSY 379 Children's Learning

The course surveys the major forms of children's learning and cognitive processes, examining both the empirical data base and the theoretical formulations used to account for the findings. Topics covered include conditioning in infancy and early childhood, language acquisition, behavior modification, discrimination-reversal learning, verbal learning, concept learning and learning to read.

PSY 380 Field Methods in Psychology

Familiarizes students with methods other than the laboratory experiment for doing field research. Includes a general overview of field surveys, field studies and field experiments, stressing problems of internal and external validity associated with each quasi-experimental design. Prerequisites: PSY 202 and 220

PSY 381 Psychology of Aggression

The phenomenon of human aggression is studied from developmental, cognitive, learning, social and crosscultural viewpoints.

PSY 382 Operant Modification of Behavior

The modification of human and animal behavior through the application of principles of learning is explored. Prerequisites: PSY 110 and 354

4 credits

Laboratory required

PSY 410 Introduction to Counseling and Psychotherapy

The course is designed to introduce students to counseling and psychotherapy as one approach in clinical psychology. The material covered includes a brief review of personality theories, as well as models of counseling and psychotherapy derived from those theories. When appropriate, students participate in counseling and psychotherapy simulations. Requirements include extensive reading, a final paper and two written examinations.

PSY 415 Psychopharmacology

Focuses on the major classes of drugs which alter brain and psychological functioning. Examines in depth and compares the effects of these drugs and the mechanisms by which they act.

Prerequisite: BIO 112-113, 163-164 or PSY 353

PSY 420 Perception

Examines the processes by which organisms form concepts of the environment through the senses. Includes a study of the physical stimuli, the nature of the sensory organs and the neutral networks and the effects of learning upon perception in humans.

Prerequisite: PSY 353

PSY 450 Cybernetic Psychology

The basic concepts of cybernetics—feedback, survival, regulation, information, amplification, etc.—are developed to show how general scientific models of the control of behavior in brains, man, society and machines can be developed.

Prerequisite: PSY 353; recommended: PSY 375

SOCIOLOGY/ANTHROPOLOGY

PSY 460 Comparative Psychology

Introduces the student to the study of the behavior of organisms, including humans, by means of the comparative method which (1) examines the diversity of behavior exhibited by life forms, (2) attempts to develop a general theory to account for many forms of behavior and their ingredients, (3) attempts to further our understanding of the complex relationship between the disciplines of biology and psychology.

Prerequisites: PSY 354 and PSY 203 or 380

PSY 480 Seminar in Psychology

An in-depth consideration of a specialized topic from current research literature in psychology. Topics vary each semester.

Prerequisites: PSY 203 and 230

PSY 481 Psychology of Politics

This course examines the psychological foundations of political behavior, focusing especially upon four areas: (1) individual participation in democratic systems, (2) social psychology of international affairs, (3) political leadership and (4) psychohistory. Political socialization, communication and decision making are also covered.

PSY 485 Research Techniques in Physiological Psychology

Introduces the student to investigative techniques, including methods of preservation and histological preparations of nervous system tissue; implantation of electrodes and cannulas for electrical and chemical brain stimulation respectively; lesioning, electrical and human EEG recording and biofeedback procedures.

Prerequisites: PSY 203 and 353

PSY 499 Independent Study

As approved and to be arranged. See also courses listed under biopsychology. 1–3 credits

Department of Sociology/Anthropology and Geography

Professors: P. Chao, V. Parrillo (chairperson), R. Glassman, S.M. Rhim, P. Stein, J. Stimson

Associate Professors: M. Ansari, J. Fitzsimmons, E. Kedar, R. Martorella, J. Pollak

Assistant Professors: A. Barrow, C. Flint, D. Harriford, C. Magarelli

Sociology/Anthropology

The sociology/anthropology major is a bachelor of arts degree program with several curricular tracks in business, criminal justice, education and social services. This program is designed to acquaint students with basic concepts necessary to understand human relationships in our pluralistic society; contribute to the students liberal education and cultural background; provide basic courses in general theory, methodology and specialized areas; supply relevant background for students preparing for fields in which a knowledge of human relations is essential.

MAJOR REQU	JIREMENTS	33 CREDITS
Required Courses		12 credits
SOC 110	Principles of Sociology	3
SOC 130	Introduction to Anthropology	3
SOC 254	Sociological Research Method	ls 3
SOC 303	History of Social Theory	3
or		
SOC 402	Modern Sociological Theory	3

SOCIAL SCIENCE

Additional C		21 credits
Select from t SOC 160	he following by advisement: Introduction to Criminal Justice	
000100	Systems	3
SOC 200	Human Races	3
SOC 201	Social Problems	3
SOC 203	Marriage and the Family	3
SOC 210	Archaeology	3
SOC 220	Introduction to Labor Studies	3
SOC 250	Urban Sociology	3
SOC 251	Minority Groups in America	3
SOC 253	Elementary Sociological Statistics	
SOC 255	Qualitative Sociological Methods	3
SOC 256	Political Sociology	. 3
SOC 257	Sex and Taboo in Primitive Societ	
SOC 260	Myth and Folklore and the Moder World	rn 3
SOC 265	Sexuality in Modern Life	3
SOC 290	Social Work and Social Welfare	5
	Policies	3
SOC 291	Social Work Practice	3
SOC 302	Biological Anthropology	3
SOC 303	History of Social Theory	3
SOC 310	Sociology of War	3
SOC 312	Comparative Criminal Justice	_
600.000	Systems	3
SOC 320	Sociology of Labor	3
SOC 322	Sociology of Organizations Labor Organizations and Organiz	3
SOC 323 SOC 324	Sociology of Religion	ing 3 3
SOC 324 SOC 325	Sociology of Social Movements	3
SOC 326	American Religion	3
SOC 327	Collective Behavior	3
SOC 328	Sociology of the Arts	3
SOC 329	Educational Anthropology	3
SOC 330	Sociology of Death and Grief	3
SOC 331	Evaluation of Social Action	3
SOC 333	Sociology of Adulthood	3
SOC 334	Sociology of Sports	3
SOC 335	Sociology of Law	3
SOC 341	Primitive and Modern Law	. 3
SOC 342	East Asian Ethnology	3
SOC 354	Social Stratification	3
SOC 356	Urban Anthropology	3
SOC 359	Cultural Change in Latin America	
SOC 360	Self and Society	3
SOC 361	Psychological Anthropology	3
SOC 365 SOC 370	Social Deviance Population and Society	3 3
SOC 370	Forecasting Future Societies	- 3
SOC 381	Sociology of Socialization	3
SOC 390	Sociology of Health and Illness	3
SOC 392	Sociology of Aging	3
SOC 402	Modern Sociological Theory	3
SOC 406	Social and Environmental Change	
SOC 408	Indians of North America	3
SOC 421	The Sociology of Revolution	3
SOC 423	Labor Law: Negotiation and Conf	lict 3
SOC 430	Community Supervision and	
	Treatment of the Offender	3
SOC 450	Shamans, Witches and Magic	3
SOC 455	Criminology	3
SOC 456	Juvenile Delinquency	3
SOC 460	Sociology of Corrections	3

SOC 480 SOC 491 SOC 499	Seminar in Criminal Justice Internship Independent Study	3 3-6 1-3
MINOR REQ	UIREMENTS	18 CREDITS
Required Cor	urses	9 credits
SOC 110	Principles of Sociology	3
SOC 130	Introduction to Anthropology	3
SOC 303	History of Social Theory	3
or		
SOC 402	Modern Sociological Theory	3
Additional C	ourses	9 credits
Courses in so	ciology/anthropology by advis	ement.

COURSES

Unless otherwise noted, all courses are for 3 credits.

SOC 110 Principles of Sociology

Examines the structure and dynamics of human society and interprets social behavior within the context of modern society and culture.

A prerequisite to all other sociology courses unless waived by the instructor.

SOC 130 Introduction to Anthropology

Designed to study humanity from the broadest perspective in the social sciences. Through an introduction to basic concepts in cultural/social anthropology, archaeology, physical anthropology and linguistics, students gain an appreciation of human evolutionary history, modern cultural diversity and the elements of social life all humans share.

SOC 160 Introduction to Criminal Justice Systems Philosophical and historical background of agencies and processes, law enforcement administration and technical problems, crime and the criminal as social and public safety problems.

SOC 200 Human Races

Describes races of humans in the world at large and examines physical differences found in human species. These differences are related to some extent to the physiological demands of various climates.

Prerequisites: SOC 110 and 130

SOC 201 Social Problems

An examination of various social problems from a sociological perspective. The interrelatedness of social problems and the role of value-beliefs are stressed.

SOC 203 Marriage and the Family

A sociological approach to the study of marriage and family living. The student is required to develop a critical evaluation of studies and research in the field.

SOC 210 Archaeology

Introduces students to the scientific study of extinct societies. Research design, site survey and excavation, data recording and interpretation, artifact identification and treatment and cultural resource management are among the topics covered.

Prerequisite: SOC 130 or permission of the instructor

SOCIOLOGY/ANTHROPOLOGY

SOC 220 Introduction to Labor Studies

An analysis of the nature of work, the individual's relation to work, the organizations workers form to protect their interests and the interactions among workers, their organizations and other institutions.

SOC 250 Urban Sociology

Examines the growth and development of cities, but with primary focus on the modern American metropolis: ecological patterns; urban institutions, with a particular emphasis on the problems of the inner city; the rise of suburbia and future prospects.

SOC 251 Minority Groups in America

Examines the experiences of all racial and ethnic groups from colonial beginnings to the present day from a sociological perspective. Particular emphasis on the recurring patterns in dominant-minority relations; differential powers; the ethnic diversity in American society; the contributions, socioeconomic conditions and institutional variation of each group.

SOC 253 Elementary Sociological Statistics

A basic course introducing the use of quantitative methods to describe social life. No special mathematics background or aptitude required. Emphasis on learning to measure and make decisions about problems that sociologists currently face in government, business, evaluative and theoretical research.

SOC 254 Sociological Research Methods

Students learn to evaluate research reports so that their future decisions and work are based on social facts. Class discussions explore reasons why valid research is the basis of effective social action. Students also gain practice in basic data gathering techniques such as observation, interviewing and questionnaire construction. No statistics or mathematics prerequisites.

SOC 255 Qualitative Sociological Methods

Provides understanding and practice in gaining and analyzing useful information in social settings by using methods such as typologies, content analysis, participant observation and interviewing.

SOC 256 Political Sociology

Examines major works of political sociology with special emphasis on the conflicting concepts between the "liberal" ideas of such writers as Bell, Parsons and Dahl and the "new left" approach of Goodman, Mills and Marcuse.

SOC 257 Sex and Taboo in Primitive Societies

The sexual impulse and its possible manifestations in the myths and customs of savages. Views on the origins and force of culture are examined.

SOC 260 Myth and Folklore and the Modern World Examines myths as providers of introspective patterns of moral values, social order, customs and religious beliefs. Traditional folklore (stories, riddles, songs) and modern folklore (mass media, urban cultures) are examined.

SOC 265 Sexuality in Modern Life

A biological, psychological and sociological study of human sexuality and the interaction between the biological and psychological needs of the individual. Covers curriculum and instruction for sex education in the schools. SOC 290 Social Work and Social Welfare Policies An introduction to social welfare and the social work profession. Attention is given to current issues, programs, policies and the various settings for social work practice.

SOC 291 Social Work Practice

Designed for both cognitive and experiential learning, this course conceptualizes a generic practice model for the helping process and demonstrates techniques through role-playing.

SOC 302 Biological Anthropology

An introduction to the biological perspective in anthropology, including primate evolution, the living, nonhuman primates, the evolution of primate behavior, the human fossil record and modern human variation and adaptability. The biocultural nature of humans is emphasized.

Prerequisite: SOC 130 or permission of the instructor

SOC 303 History of Social Theory

Focuses on the works of the great classical sociologists. The theories of Comte, Spencer, Durkeim, Marx, Weber, Simmel, Pareto, George Herbert Mead and others are analyzed in light of contemporary social conditions and in terms of the development of sociological theory.

SOC 310 Sociology of War

Examines the theories surrounding the causes, nature and effects of modern warfare and its influence on shaping social structure and personality.

SOC 312 Comparative Criminal Justice Systems

A comparative analysis of criminal justice systems in the United States and selected foreign countries. Emphasis on the administration and organizational aspects, functions and processes at work in selected foreign criminal justice systems. The relationships of the police to the government and the people they serve are analyzed.

SOC 320 Sociology of Labor

Examines three levels of labor activity: working class roles, labor disputes and collective action. The study of national labor movements from the founding of the IWW to the present rank-and-file movements of today.

SOC 322 Sociology of Organizations

A theoretical course tracing development of organizational theory to the present; a practical course, considering the increasing impact of bureaucratic organizations on our lives.

SOC 323 Labor Organizations and Organizing

Examines the structural problems facing labor administrative apparatus at the state and local levels. Regional problems related to organizing tasks are discussed within the framework of current labor law and collective bargaining techniques.

SOC 324 Sociology of Religion

Examines the social dimensions of religion and the relationship between religion and society.

SOC 325 The Sociology of Social Movements

Course is divided into two parts: the first deals with social movements emerging from class conflicts (unions, unemployment unions, etc.); the second deals with cultural and national conflicts (black struggles, women's liberation, the youth movement, etc.).

SOCIAL SCIENCE

SOC 326 American Religion

Analyzes the social meanings of religion in America, with particular reference to the liberal and conservative viewpoints. Explores the social significance of contemporary religious developments and movements such as the Jesus Movement, cultism and Reverend Ike's Blessing Plan.

SOC 327 Collective Behavior

An introduction to various types of collective behavior with a comparison of theoretical approaches to each type. Focuses on groups of large size, with or without face-toface interaction. Political expressions are discussed, but the course orientation is theoretical and empirical rather than ideological.

SOC 328 Sociology of the Arts

Designed to show the reciprocal relationship between the arts and society. Examines how various attitudes, values, norms and institutions of society are revealed in mass culture forms (e.g., television, rock music, painting, literature, theatre, dance, photography and film), in an effort to help the student understand the vital place of the arts in society, as well as the impact of culture on the arts.

SOC 329 Educational Anthropology

This course deals with a study of current theories, processes and concepts in the anthropology of education. Anthropological research and field techniques, as applied to the study of education, is examined from a crosscultural perspective. A major focus is on contemporary education in the United States.

SOC 330 Sociology of Death and Grief

Death as an institution is studied by focusing on death and social values, cultural, components of grief and social functions of bereavement. Particular attention is paid to the social organization of death and dying in bureaucratic settings.

SOC 331 Evaluation of Social Action

The principles, techniques and applications of evaluation research are learned through the utilization of research methodology and statistics. Students develop fieldwork projects for analysis in the areas of administrative studies, education, public safety, law, health, nursing, social and behavioral sciences.

SOC 333 Sociology of Adulthood

Focuses on the major issues for women and men during the early and middle years of adulthood. Included are an examination of personality development; singlehood, marriage, family and parenting roles; work, career and avocational experiences.

SOC 334 Sociology of Sports

This course analyzes the relationship between sport, society, social institutions and social interaction; cultural, social and situational factors affecting the dynamics of sport; social processes and social change.

SOC 335 Sociology of the Law

An analysis of the social basis, functions and effects of law, both as a profession and as a system of social control.

SOC 341 Primitive and Modern Law

Explores the interaction between the legal norms operating in modern and primitive societies.

SOC 342 The Ethnology of East Asia: China and Japan

Examines the development of Chinese and Japanese cultures through the study of marriage, the family, village life economic organization, religion. Modernization, industrialization and cultural change are also explored.

SOC 354 Social Stratification

Treats both theory and realities with an emphasis on American society. Course concludes with an examination of power in the United States.

SOC 356 Urban Anthropology

This course examines from a cross-cultural perspective the ecological and social changes that occur from urban growth.

SOC 359 Cultural Change in Latin America

The origin and development of processes of culture change in Latin America. Gives the student an opportunity to learn about the cultural institutions of highly developed indigenous cultures and their influences upon present day Latin American cultures. Examines current writings on Latin America which deal with social change and helps the student develop scientific objectivity (an anthropological prerequisite) in the analysis of the social problems resulting from change. Particularly useful for international management majors.

SOC 360 Self and Society

A study of the impact of society on the formation of each individual's personality through analysis of language, definitions and values.

SOC 361 Psychological Anthropology

The interaction of culture and personality in various parts of the world. Explores specific topics which have cultural impact on the development of personality.

SOC 365 Social Deviance

Examines the concept of deviance in society through a study of the issues of value judgments, abnormality and eccentricity. Implications are found for the causes of the behavior of groups socially labeled as deviant.

SOC 370 Population and Society

Addresses four problems: (1) dangers of world population growth for individual survival, (2) the interaction between change, social structure and population, (3) social psychological attitudes in fertility decisions, (4) the uses of the census to describe social problems.

SOC 372 Forecasting Future Societies

Students are introduced to current and classical models of social change, visionary forecasts found in utopian and dystopian fiction, the field of futuristics and the art of social forecasting.

SOC 381 Sociology of Socialization

An in-depth analysis of personality development and behavior modification from infancy to adulthood through various agents of socialization. The work of Aries, Freud, Mead, Erikson, Bettelheim, Goodman and Sheehy are included.

SOC 390 Sociology of Health and Illness

Analyzes social factors in relation to health and disease. Considers definitions of health, illness behavior, the formal and informal organization of health professions and institutions and the expanding role of government in the health field. Uses both theory and current research.

SOC 392 Sociology of Aging

The demography of aging, age and its social structure; age as a social problem. Population trends are examined as they relate to health problems of the elderly. Focus on the changing role of the elderly in the kinship network.

SOC 402 Modern Sociological Theory

An analysis of contemporary social thought expressed by Talcott Parsons, Robert H. Merton, C. Wright Mills, Lewis Coser, R. Dahrendorf, Herbert Marcuse, G. H. Mead, E. Goffman, H. Blumer, Peter Blau, G. Hormans, Garfinkel and others.

SOC 406 Social and Environmental Change

Problems of environmental social change are critically examined and evaluated. Emphasis on exploring small and large scale modes of change. Develops skills in the analysis of social change. Students learn to design micro changes on the institutional level and to recognize what connections do and do not exist between micro and macro level changes.

SOC 408 Indians in North America

Demonstrates the continuum of indigenous cultures in North America from pre-Columbian times to the present using historical, ecological and empirical field data to study cultural processes and changes and the ways they affect interethnic and interracial interaction in the United States.

SOC 421 The Sociology of Revolution

Examines revolution as a social phenomenon. Particular attention is given to contrasting the theories of revolution of the traditional Marxian urban worker-centered insurrection with Third World guerrilla warfare groups.

SOC 423 Labor Law: Negotiation and Conflict

An analysis of private and sector labor relations, with an emphasis on law, practice and policy. Students participate in practical collective bargaining and arbitration exercises as part of the learning experience.

SOC 430 Community Supervision and Treatment of the Offender

Focuses on an analysis of theories and practices of parole and probation. Is also concerned with the current trend toward diversion of offenders from the criminal justice system and special community programs.

SOC 450 Shamans, Witches and Magic

Provides the student insights into the meaning of witchcraft and sorcery as manifestations of the belief in the supernatural. It gives the student an opportunity to learn about the functions of witchcraft and sorcery in specific societies and the cultural roles of the shaman, witch and sorcerer.

SOC 455 Criminology

An examination of the various components of the criminal justice system and how they reflect societal values and attitudes.

SOC 456 Juvenile Delinquency

A comprehensive study of the problems of delinquency. Blends all theoretical approaches with pertinent data in its analysis of causes, treatment and control.

SOC 460 Sociology of Corrections

An in-depth analysis of penal institutions from a sociohistorical perspective. Included are how prisons emerged, the prisonization process, women's prisons and the rehabilitation re-entry process.

SOC 480 Seminar in Criminal Justice

An analysis of the major problems in criminal justice and the relation of the criminal justice department to other law enforcement and civic agencies.

SOC 491 Internship

This course provides qualified students practical work experience in an applied sociology or anthropology setting. Periodic conferences and a monthly seminar are an integral part of this program. 3–6 credits

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SOC 499 Independent Study As approved and to be arranged.

1-3 credits

Geography

The geography major offers a program leading to the degree of bachelor, of arts designed to acquaint students with "Spaceship Earth." Majors who wish to teach in secondary schools should pursue courses necessary for meeting certification requirements in social studies. Students who wish to study certain specific areas of geography and/or attend graduate school are urged strongly by their advisors to take the appropriate minor program or programs. All majors are assigned an advisor.

MAJOR REQU	JIREMENTS	30 CREDITS
Required Cou	irses	9 credits
GEO 150	World Regional Geography	3
GEO 220	Environment and Humans	3
GEO 480	Seminar: Topics in Geograph	у 3
Systematic G	eography	12 credits
Choose four of	of the following:	
GEO 130	Human Ecology	3
GEO 204	New Jersey Wildlife at the Cro	ossroads 3
GEO 230	Population and Settlement	3
GEO 250	Historical Geography of Bibli	ical
	Lands	3
GEO 300	Geopolitics	3
GEO 310	Economic Geography	3
GEO 401	Cartography	3
GEO 404	Polar and Arctic Geography	3

SOCIAL SCIENCE

Regional Ge	ography	9 credits
Choose three	e of the following:	
GEO 332	Middle East's Geography and	
	Problems	3
GEO 333	Europe's Geography and Prob	lems 3
GEO 334	Africa's Geography and Proble	ems 3
GEO 335	Latin America's Geography and	d
	Problems	3
GEO 336	Soviet Union's Geography and	I
	Problems	3
GEO 338	United States' and Canada's	
	Geography and Problems	3
GEO 339	New Jersey's Geography and	
	Problems	3
MINOR REQ	UIREMENTS	18 CREDITS
GEO 220	Environment and Humans	3

Plus 15 credits in geography by advisement.

CERTIFICATION REQUIREMENTS 27 CREDITS Students interested in obtaining teacher certification in social studies must complete the requirements listed under the Department of Curriculum and Instruction.

COURSES

Unless otherwise noted, all courses are for 3 credits.

GEO 130 Human Ecology

Concerned with the conservation of natural resources and man's role in altering the face of the earth.

GEO 150 World Regional Geography

A survey of the whole earth by continent and natural regions; basic physical, cultural, socioeconomic and political factors are considered.

GEO 204 New Jersey Wildlife at the Crossroads

A study designed to introduce the student to the complexities of wildlife management in the heart of the urbanized northeast United States. A variety of field trips are taken to help the student experience man-land-animal relationships.

GEO 220 Environment and Humans

Designed to elucidate the patterns of the physical earth and man's environment. Central focus on the functional interrelationships of geography, land forms, climate, soil, vegetation and water.

GEO 230 Population and Settlement Geography

A geographical interpretation of the world's population distribution, numbers and dynamics through time. Special emphasis on the distribution of man's habitation forms and patterns, including the functioning of urban areas.

GEO 250 Historical Geography of Biblical Lands

An analysis of the geography of the ancient Near East and other ancient Near Eastern areas.

GEO 300 Geopolitics

The influence of such factors as location, size, form, surface, climate, natural resources and population on the political development of nations and their roles in world politics.

GEO 310 Economic Geography

Examines humans' economic activities on a global scale. Contributions of cultural and physical environmental factors to these activities are analyzed.

GEO 331-339 Geographical Area Studies

Each of these geographical area studies deals with the geographical analysis of the region's physical features, natural resources, cultural patterns, problems and economic potentials, together with its place in the world.

GEO 331	Asia's Geography and Problems
GEO 332	Middle East's Geography and Problems
GEO 333	Europe's Geography and Problems
GEO 335	Latin America's Geography and Problems
GEO 336	Soviet Union's Geography and Problems
GEO 337	Australia and Oceania's Geography and Problems
GEO 338	United States' and Canada's Geography and Problems
GEO 339	New Jersey's Geography and Problems
GEO 401 A basic cou	Cartography rse in map making. Covers projections,

A basic course in map making. Covers projections, thematic, relief and statistical cartography.

GEO 404 Polar and Alpine Geography

Analyzes interrelationships among the parameters of locations, size, range of physical and cultural features and the ultimate impact of modern technology on these fragile ecosystems.

GEO 480 Senior Seminar

A description of the aims, methods, deeds and rewards of geography as a discipline. Considers programs and positions in geography.

GEO 499 Independent Study

As approved and to be arranged. 1–3 credits

Directories

Directories

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Judith Hegg, Librarian 1. B.A., Michigan State University; M.L.S., SUNY Geneseo; Ph.D., University of Missouri. Appointed November 1982.

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Martin Schnur, Assistant Professor, Art. Appointed September 1979.

Gary K. Schubert, Associate Professor, Art. B.S., University of Wisconsin; M.F.A., University of Massachusetts. Appointed September 1969.

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Carole J. Sheffield, Associate Professor, Political Science. B.S., Eastern Connecticut State College; M.A., Ph.D., Miami University, Ohio. Appointed September 1973.

David Sherman, Production Company Manager, Theatre. B.S., Centenary College; M.A., Montclair State College. Appointed September 1988.

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Sam Silas, Professor, Movement Science and Leisure Studies. B.S., M.S., Ph.D., Southern Illinois University. Appointed July 1975.

Toby Silverman-Dresner, Associate Professor, Psychology. B.A., Brooklyn College CUNY; M.A., Teachers College, Columbia University; Ph.D., New York University. Appointed September 1975.

Barry R. Silverstein, Professor, Psychology, B.A., City College CUNY, M.A., Teachers College, Columbia University. Appointed September 1969.

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William Small, Jr., Dean, School of Social Science. Professor, Political Science. A.B., Howard University; J.D., Howard University School of Law. Appointed September 1970. Sharon Smith, Associate Professor, Art. B.A., Stanford University; M.A., Ph.D., New York University. Appointed September 1974.

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Richard Varron, Data Processing, Programmer. B.A., William Paterson College. Appointed May 1988.

Edward Veasey, Director of Facilities. Appointed January 1980.

H. Robert Verbeek, Graphic Artist. A.A.S., New School for Social Research/Parsons School of Design. Appointed August 1983.

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Edith Wallace, Professor, Biology, B.A., M.A., Montclair State College; Ph.D., Rutgers University. Appointed September 1968.

Daniel Watter, Assistant Professor, Health Science. B.S.W., University of Alabama; M.A., Montclair State College; Ed.D., New York University. Appointed September 1981.

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Richard Weinberg, Director, Continuing Education. B.A., Brooklyn College; M.S., Hofstra University; Ph.D., New York University. Appointed July 1986.

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Martin Weinstein, Professor, Political Science. B.A., Columbia College; M.A., Ph.D., New York University. Appointed September 1971.

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Jean M. Werth, Professor, Biology. B.S., Nazareth College; M.S., Ph.D., Syracuse University. Appointed September 1972.

Stanley C. Wertheim, Professor, English. B.A., M.A., Ph.D., New York University. Appointed September 1970.

Doris G. White, Professor, Curriculum and Instruction. B.S., M.S., Ph.D., University of Wisconsin. Appointed September 1957.

Robert K. White, Professor, Psychology. B.A., Milligan College; Ph.D., University of Texas. Appointed September 1969.

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William M. Willis, Professor, Educational Leadership. Ed.M., Ed.D., Harvard Graduate School of Education. Appointed September 1972.

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Stanley W. Wollock, Professor, Curriculum and Instruction. B.S., Kutztown State College; M.Ed., Western Maryland College; Ed.D., New York University. Appointed September 1962.

William H. Woodworth, Professor, Music. B.M.E., Eastern Michigan University; M.M., University of Kentucky; Ed.D., University of Michigan. Appointed September 1966.

Vicki Jeanne Wulwick, Professor, Marketing and Management. B.S.E.E., Columbia University; M.B.A., Baruch College; Ph.D., City University of New York. Appointed September 1986.

Keumsil Kim Yoon, Assistant Professor, Languages and Cultures. B.A., Ewha University; M.A., Ph.D., University of Paris-Sorbonne. Appointed October 1986.

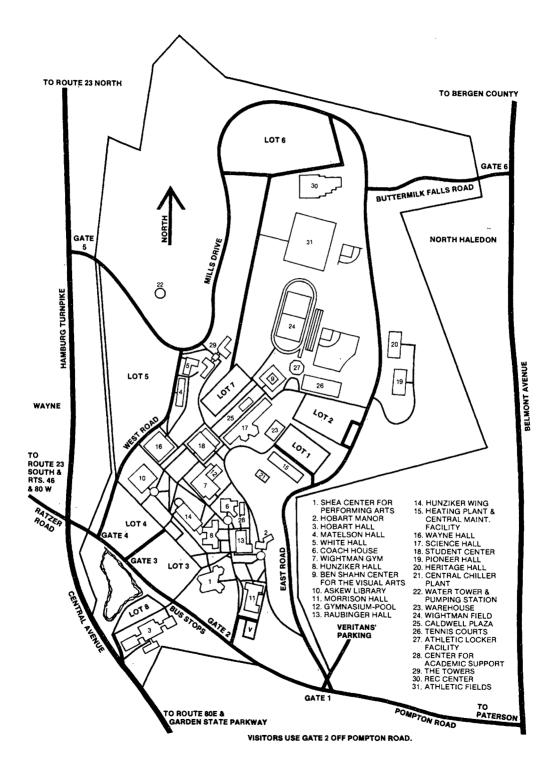
William J. Younie, Professor, Special Education and Counseling. B.S., Boston State College; Ed.M., Tufts University; Ed.D., Columbia University. Appointed September 1970. Ann Yusaitis, Assistant Director, Counseling. B.S., M.A., Seton Hall University. Appointed September 1967.

Mary Beth Zeman, News Writer/Media Specialist, College Communications. B.A., Douglass College of Rutgers. Appointed August 1986.

Kenneth M. Zurich, Director, Career Services. B.A., M.A., Montclair State College. Appointed November 1972.

CAMPUS MAP

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How to Reach WPC

1. From New York City via George Washington Bridge or Lincoln Tunnel or Eastern New Jersey:

Take Route 46 West or Route 80 West or Route 3 West to 46 West. *Proceed to Route 23 North. Continue on Route 23 North approximately one mile to Alps Road. Turn right and proceed approximately two miles to traffic light at intersection of Alps and Ratzer Roads. Turn right on Ratzer and proceed approximately two miles to traffic light at intersection of Ratzer Road and Hamburg Turnpike. After crossing intersection, Ratzer becomes Pompton Road. Proceed about 200 yards. College entry Gates 4 through 1 are on left along Pompton Road.

2. From Southern and Central New Jersey via the Garden State Parkway:

Take Garden State Parkway North to Exit 153B (on left), marked Route 3 and 46, West Paterson. Take Route 3 to Route 46 West. Follow directions from * in #1 above.

3. From Western New Jersey:

Take Route 80 East to Exit 53. Proceed one-half mile on Route 46 East. Exit on Riverview Drive, Wayne. Proceed to fourth traffic light. Turn right on Valley Road. Proceed to fourth traffic light. Turn right on Ratzer Road and proceed approximately two miles to traffic light at intersection of Ratzer Road and Hamburg Turnpike. After crossing intersection, Ratzer becomes Pompton Road. Proceed about 200 yards. College entry gates 4 through 1 are on left along Pompton Road.

4. Take Route 46 East. Follow directions from * in #1 above.

5. From Northern New Jersey:

Take Route 23 South to the Ratzer Road/Service Road jughandle. Cross highway, then proceed north on Service Road to Ratzer Road exit. Proceed approximately four miles to third traffic light at intersection of Ratzer Road and Hamburg Turnpike. After crossing intersection, Ratzer becomes Pompton Road. Proceed about 200 yards. College entry Gates 4 through 1 are on left along Pompton Road. Or:

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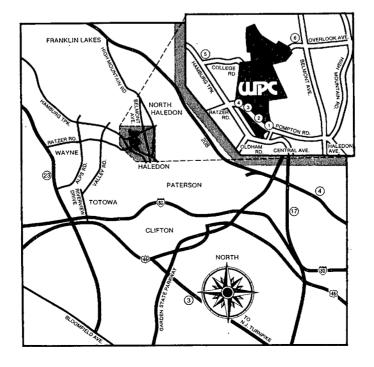
Take Route 208 South to exit marked Colonial Road— High Mountain Road—Franklin Lakes. Proceed on exit ramp to stop sign. Turn left on High Mountain Road. Continue approximately three and one-half miles to fork. Take right fork on Belmont Avenue. Proceed on Belmont about two miles to traffic light (Dunkin' Donuts on left). Turn right on Pompton Road. Proceed up hill approximately one-half mile. College entry Gates 1 through 4 are on right along Pompton Road.

6. From Northern New Jersey via the Garden State Parkway:

Take the Garden State Parkway South to Exit 159, Route 80 West. Follow directions from * in #1 above.

Public Transportation

Public transportation to the College is available from the surrounding areas. Transport of New Jersey P54 runs directly to the College. For further information on bus service, telephone 800-772-2222.



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